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PUBLIC ACCESS TO MARKET DATA: IMPROVING TRANSPARENCY AND COMPETITION

HEARING

BEFORE THE

SUBCOMMITTEE ON
CAPITAL MARKETS, INSURANCE, AND
GOVERNMENT SPONSORED ENTERPRISES

OF THE

COMMITTEE ON
FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

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PUBLIC ACCESS TO MARKET DATA: IMPROVING TRANSPARENCY AND COMPETITION

WEDNESDAY, MARCH 14, 2001

U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON CAPITAL MARKETS, INSURANCE,
AND GOVERNMENT SPONSORED ENTERPRISES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, DC.

The subcommittee met, pursuant to call, at 10:02 a.m., in room 2129, Rayburn House Office Building, Hon. Richard H. Baker, [chairman of the subcommittee], presiding.

Present: Chairman Baker; Representatives Oxley (ex officio), Ney, Shays, Royce, Barr, Shadegg, Weldon, Fossella, Miller, Ose, Hart, Rogers, Kanjorski, Bentsen, Mascara, S. Jones of Ohio, Sherman, Meeks, Inslee, Moore, Ford, Lucas, Shows, Crowley, and Israel.

Chairman BAKER. I would like to call this hearing of the Capital Markets Subcommittee to order, and welcome everyone here this morning. This hearing is the result of interest by many in the explosive growth of our markets and the concurrent growth in the supply of information to literally millions of investors across the country on a daily basis who are now, even despite the morning news about the activities in the market, are still investing heavily, with working families providing significant contributions to our economic growth.

At the core of the hearing this morning is the discussion relating to the delivery of market data, that material on which every investor bases an investment decision and on the mechanisms by which that data is collected and delivered, and associated charges related to the delivery of that product for the educated investor.

I think it important to recognize the enormous growth in revenue that this product has provided to the exchanges, not that that in itself is any indicator of whether this is a good thing or a bad thing, just the significance of it to the performance of the markets. Anywhere from 20 percent to 40 percent of an individual exchange's net revenues now is generated by the sale of this information.

Up rather dramatically, despite the fact that over the course of recent years, reductions in fees have been very significant.

The subcommittee is here this morning to better understand the function of the markets, how market data is provided, the benefit to consumers it presents, and to ensure the 75 amendments to the

Securities Act provided that the charges associated with the distribution of this information are fair, reasonable, and non-discriminatory.

To that end, we will have a panel of witnesses this morning who can speak directly to how this system functions and better help the subcommittee move forward with a careful examination of this subject matter over the coming months.

I am particularly appreciative that the Chairman has taken such an interest in this topic and has done good work in his former capacity in the committee on Commerce on this very subject.

At this time, I would like to recognize the Ranking Member, Mr. Kanjorski, for any opening statement he would choose to make. Mr. Kanjorski, it would be my intent, with your agreement, to recognize you and then the Chairman for opening statements, and then move to our witnesses, if there's no objection.

Mr. KANJORSKI. No objection.

Chairman BAKER. Thank you, Mr. Kanjorski.

Mr. KANJORSKI. Mr. Chairman, thank you for the opportunity to comment on market information issues before we hear from our witnesses today. The securities industry presently faces few issues as important or as complex as those surrounding the ownership and distribution of market data.

In short, the wide distribution of market information remains a fundamental component of our Nation's securities markets. A regulatory framework that promotes the transparency of market data—especially the real-time, public dissemination of trade and quote information—helps to make certain that all market participants have access to prices across our national market system. This access, in turn, helps to provide for efficient price discovery and the best execution of investors' orders.

Congress first addressed the issue of market information when it enacted the Securities Acts Amendments of 1975. This statute, among other things, charged the Securities and Exchange Commission with establishing a consolidated, real-time stream of market information for securities in order to make transaction and quotation information widely available. As a result of this law, millions of investors worldwide now have easy access to market data.

But the world has changed substantially since Congress enacted the legislation governing market information, and we may now need to refine our approach on such matters. For example, we passed the law and the Securities and Exchange Commission developed the regulations governing market data before the advent of technological and communication advances like the internet, electronic communications networks, and alternative trading systems. This new technology has greatly expanded the opportunities for retail investors and interested individuals to obtain access to real-time market information.

Additionally, critics of the current system for distributing consolidated market data have raised a number of questions about the present system in recent years. For example, some contend that although market data fees for retail investors have fallen by 50 to 80 percent since 1998, they remain unusually high because no competition exists in the field of market data collection and distribution. To address this problem, some argue that we should allow

competing entities to provide consolidated information and/or permit the exchanges to provide their own data outside the consolidator. By providing investors with more complete market information, we would promote the goal of greater transparency and thereby improve competition.

Although the Securities and Exchange Commission has recently begun to examine these difficult issues and other related and complicated questions through its concept release and advisory committee on market information, it is appropriate for us to begin to educate the Members of our subcommittee about these complex subjects. Accordingly, we will hear today from a variety of witnesses about their views on market data. I want each witness to know that I approach the issue of market information with an open mind.

For me, one can distill the complex debates surrounding market data into three key questions: First, who owns market information?; Second, how much should we charge for market information?; and third, how should we distribute market information? The answers of our panelists to these questions will help me to discern how we can maintain the efficiency, effectiveness and competitiveness of our Nation's capital markets into the future, and what further legislative action, if any, we should take to address the issue of market data.

In closing, Mr. Chairman, today's hearing is just the beginning of a discussion in the 107th Congress about market information. I anticipate that we will hold additional hearings on this issue in upcoming months, especially after the Securities and Exchange Commission's Advisory Committee on Market Data publishes its report in September. I therefore look forward to working closely with you and with others to address this multifaceted, complicated and important matter. Finally, I think we are indeed fortunate, on the Financial Services Committee, to have the new Chairman with his wealth of information that carries over from his former service on the Commerce and Energy Committee, so I look forward to his opening statement today also, Mr. Chairman.

Thank you.

[The prepared statement of Hon. Paul E. Kanjorski can be found on page 59 in the appendix.]

Chairmaan BAKER. Thank you, Mr. Kanjorski.

Chairman Oxley.

Mr. OXLEY. Thank you, Mr. Chairman.

I want to commend you for holding this hearing on an issue that is fundamental to the health of our capital markets and, indeed, this issue is quite new to I suspect the vast majority of Members on the subcommittee.

This morning, we will examine how stock market data is provided to the public, how it is paid for, what information is available to the public about market data fees, and how competition might improve the way investors get market data.

While the regulatory structure we will examine is complicated, our goal is simple: to ensure that investors are getting the best possible information about stock prices in the most efficient way.

As one observer put it last year, following a hearing I held on this subject, stock market data, that is the quotes at which people

are willing to buy and sell stock, and the information showing the price of the last sale of a stock is oxygen to investors.

Indeed, the transparency of our marketplace is the backbone of its success. Unfortunately, the regulatory structure that exists today was put in place back in the 1970s when the only person using a cell phone was George Jetson, and Al Gore hadn't even thought about the internet yet.

That outdated regulatory structure, which may have made sense before the advent of modern communications technology, put into place a system that prevents competition and the provision of consolidated market data, and impedes innovation in the way market data is presented to investors.

The cost of market data is significant and those costs are passed on to investors, just like the transaction fees this subcommittee heard about last week.

Competition is always a better way to set prices than regulation. With no competition in the provision of consolidated market data, the only check on the fees is regulation.

One important question we will consider is whether market data fees are fair, reasonable, and not unreasonably discriminatory, which is the statutory requirement established by the Congress in the 1970s.

Of course, the alternative is to actually introduce competition into the market for consolidated market data.

We'll also hear from our witnesses today about what new competition in this field would mean for investors and the markets.

We'll also be seeking to learn how investors might benefit if more information about market data, costs and fees were made public.

While the SROs publish a great deal of information about market data fees on their websites, some information, for example, certain information about pilot programs is not so readily available.

Today, we will examine the implications of increasing the transparency of market data terms and conditions. No discussion of market data can ignore the fact that market data fees play an important role in funding the activities of stock exchanges in the NASDAQ market, but some critics of the current system question how market data revenue should be used.

Should they subsidize the cost of regulation? Should they be limited to the costs of providing market data?

If they are reduced by competitive forces or otherwise, will investors be subject to new fees to replace that lost revenue?

Some suggest that the governance of market data plans, which set market data fees in the first place, should be expanded to include all market participants like ECNs and the public, as opposed to only the SROs that receive market data revenue.

These are some of the issues we will examine today.

In addition to the cost of paying for market data, the current regulatory structure imposes administrative costs on the marketplace. Market participants who purchase consolidated market data face a maze of different types of fee structures and contract requirements.

Reducing the administrative burdens associated with the purchase of market data would bring greater efficiency to the marketplace and ultimately save investors money.

I thank each of our witnesses for coming today to inform the subcommittee on the very important issue that we have before us, and look forward to your testimony.

I yield back the balance of my time.

[The prepared statement of Hon. Michael G. Oxley can be found on page 63 in the appendix.]

Chairman BAKER. Thank you, Mr. Chairman. I do very much appreciate your past work on this subject, your interest in participating in our hearing this morning, and understand clearly the interest that you have in this important issue.

Today, there are literally millions of individuals investing today who were not even participants in the economic process a few years ago, primarily as a result of technology.

And it is important that this subcommittee examine the delivery of this information to those individuals to ensure that whether a person is investing $200,000 or $200 million, that they get access to the same information in the same timeframe as all other participants.

This morning, we are fortunate to have with us a distinguished panel of witnesses representing the various interests from the markets, and I've been presented with the order for recognition this morning with Mr. Randy MacDonald, Vice President and Chief Financial Officer, Ameritrade Holding Corporation being our first witness this morning.

Welcome, Mr. MacDonald.

We, in all cases—I should give this brief explanation—we limit opening statements of the subcommittee because of the number of individuals on the subcommittee today, we strongly recommend that each witness present his or her thoughts within the 5-minute window.

All witnesses' statements will be incorporated and made part of the official record in their entirety.

And with that request, Mr. MacDonald, I will recognize you and welcome you to our subcommittee.

STATEMENT OF RANDY MacDONALD, CHIEF FINANCIAL OFFICER, AMERITRADE HOLDING CORPORATION

Mr. MACDONALD. Thank you very much, Mr. Chairman Baker, and Chairman Oxley. I appreciate you inviting Ameritrade today.

Ameritrade has always represented the small investor, and I'd like to talk to you about our concerns. We have four concerns.

Let me first start off by saying, with our pending acquisition of Tradecast, we're one of the largest brokers in the world, Charles Schwab, in our estimation, the largest.

We are completely agnostic about our order flow. That is, we are not an ECN, we are not a marketmaker, we do not benefit from internalizing our order flow; we strictly act as an agent for the small investor.

The first point I want to make is, the present practice of distributing quotes is discriminatory to the individual investor, and I'll elaborate.

The second point is that the costs, the administrative costs to us, are spiraling out of control. We are at a competitive disadvantage because of the present monopoly.

The third point I wanted to make is that the tape revenue in fact should belong to those people who actually contribute the orders, and that is the customers out there.

And the fourth point I wanted to make is that the SROs have been unchecked. It's a case of the fox being in charge of the hen house. They are taking these excess profits and creating competitive systems, systems that will compete with other market participants.

The first question is what are the regulatory impediments? I would say that one thing that is going well, one of the benefits is that, in fact, people are getting information real-time.

But let me start off with the discrimination. Today, I cannot deliver real-time quotes in a cost effective way to all 1.4 million customers of Ameritrade.

There is an onerous subscription agreement. There is the cost of either per quote or a subscription fee. My average customer, about half of them trade less than once every two months. The fee that I have to pay to the four SORs are $1 a month, and if I have one customer who is paying me a commission of $8 every 2 months, I've done nothing but recover my cost for market data distribution.

So 1.4 million customers are not getting real-time quotes. I think they're disadvantaged.

The second point is on what I perceive to be the abuses by the SROs in distributing this information and causing administrative nightmares.

In the past week, we've had three instances that kind of illustrate this point. One is we were trying to change our methodology for distributing real-time quotes, and we were obtaining subscription agreements from customers who were getting real-time quotes, and we were told by one of the SROs they would not approve that, because they didn't like the method of distributing the subscription agreement, so we have to go back to the planning board.

The second thing is they told us that the sign-on had to be because we do not allow for a single sign-on to the website that we could not obtain subscription agreements, that we would have to pay on a per-quote basis.

So to the extent that someone is calling in to a broker, that quote would be free to that customer. But to the extent that they are using the web, they have to pay for that quote and that's the discrimination.

The fact that there is dual sign-on, my wife and I can both sign on to my account, that is an impediment to allowing us to distribute real-time quotes, and I think that's arbitrary, I think that's capricious.

And the third point I want to make is, in dealing with these entities, they reflect their monopolistic attitude, and we've had an incident where the chief technology officer, last week, was put on the speaker phone by one of these SROs and she said, "I will be doing other work while you're speaking. If I like what you're saying, I'll listen; otherwise, I will just ignore you."

And so we're opening the window, we're shouting out, "We've had it and we're not going take it anymore."

We paid a million dollars in market data fees last month. This is an enormous competitive disadvantage for us.

Thank you very much.

[The prepared statement of Randy MacDonald can be found on page 65 in the appendix.]

Chairman BAKER. We will have significant questions from all the Members for you to have a further opportunity to comment on this. We do appreciate your direct testimony.

Our next witness is Mr. Robert Britz, Group Executive Vice President representing today the New York Stock Exchange.

Welcome, Mr. Britz.

STATEMENT OF ROBERT G. BRITZ, GROUP EXECUTIVE VICE PRESIDENT, OPERATIONS GROUP, NEW YORK STOCK EXCHANGE, INC.

Mr. BRITZ. Thank you, Chairman Baker, Vice Chairman Ney, Ranking Member Kanjorski and certainly Chairman Oxley.

I am Robert Britz. I am here representing the New York Stock Exchange and we appreciate the opportunity to be before you this morning.

There is much to say on this subject and not a great deal of time, so I will get straight to it.

Markets, such as the New York Stock Exchange, exist to manufacture securities prices, and basically only to manufacture securities prices. We tell the world what a fine slice of ownership—a single share of the global enterprise that is Exxon Mobil, for example—is worth on a moment-to-moment basis.

We take raw material, investors orders that they have entrusted to their brokers, and from that raw material, we create valuable market data without which markets could not operate.

Markets like the NYSE create their value through a combination of this information on the one hand, and fast, secure, reliable delivery systems on the other.

So think of the New York Stock Exchange as being in the business of producing market data, manufacturing securities prices. At the end of the day, the price is our only product.

The CTA, the Consolidated Tape Association, on the other hand is an SEC-sponsored joint venture among national and regional stock exchanges. It doesn't produce data—the markets produce data—so much as it consolidates and collects and redistributes the data to the next level, the information vendors.

So with that as broad background, admittedly there's been a fair amount of discussion about this subject over the past couple of years, and I must say much of it is a surprise to us.

In truth, it's never been obvious to us what the noise has been about. It's clearly not about investors' access to the data. Individual investors and the general public, for that matter, have access to unlimited real-time data through a variety of delivery systems; telephones, television; PCs, personal digital assistants, pagers, automated teller machines, and so on.

Market data is available in the home and in many public places; schools, libraries, airports, even on the plane itself, restaurants, train stations, shopping malls, and literally on the street.

In contrast to some commentators who have, in the past, suggested that investors are struggling for access to real-time market data, in fact they can barely avoid it.

Simply stated, the data is pervasive and I believe the best is yet to come.

So it is not about availability. It can't be about the cost of the access to the data for investors, because it's free from an endless number of sources.

Indeed, the data is so inexpensive to information vendors that many purchase it, give it away, and still profit handsomely.

It shouldn't be about brokers' cost of market data for a couple of reasons. Brokers themselves establish the prices they will pay for the market data.

Given that fact, it's not at all surprising that the cost of market data has come down dramatically over the past 25 years to the point where U.S. market data, CTA, NYSE market data is among the least expensive of any market in the world.

It's hard to see how this discussion can be about control or governance of market data since all the power rests in the customer-laden boards of the self-regulatory organizations. Simply put, those who establish market data fees are the ones who pay those fees. They can raise or lower any fee any time they care to.

Most recently, this discussion has morphed into being about transparency of market data processes. But even that's hard to follow.

The SEC literally gave birth to the Consolidated Tape Association. It attends all meetings. It reviews, publishes and approves all significant initiatives. It has the power to override any action. It has the power to unilaterally amend the Consolidated Tape plan.

So CTA hardly operates in a closet.

Additionally, it's very important to realize CTA is a conduit. The discussions and the decisionmaking that end up at the Consolidated Tape Association begin and actually take place again at the constituent-laden boards of the self-regulatory organizations.

CTA's initiatives begin at the grass roots level with customers. To the extent an idea gains some traction, it then moves through various industry organizations. If it continues to have some consensus, it goes to our board, it then goes, coming out of the board, to the Securities and Exchange Commission. The SEC publishes it for public comment, they review it, ultimately they approve or disapprove nonetheless a very rigorous and transparent process.

All CTA fees contracts are both standard in terms of the terms and are publicly available on NYSE.com among various other distribution channels.

The CTA annually publishes audited financial statements and issues those to the Securities and Exchange Commission for public review. The NYSE and the markets do likewise.

It's not clear what more we could do, viz a viz, transparency, but we are open to suggestions.

Mr. Chairman, you asked a very important question in your letter, which is, how does market data recover its costs and subsidize other areas of the SROs.

At the NYSE, market data does not recover its cost and it is therefore in no position to subsidize anything else. You should understand that the New York Stock Exchange gets a much smaller percentage of its revenues from market data than do other markets.

I would never suggest it's not an important part of our funding, however, and in that regard there's a very important point to be made. We must be careful not to do anything that hinders markets' abilities to make technical infrastructure investments to maintain and enhance their operational stability.

To the extent that markets like the NYSE don't make infrastructure or order processing network upgrades on the front end, which run to the hundreds of millions of dollars, there is no market data on the back end.

One online discount firm recently was quoted as saying, it would be unprofitable and therefore unthinkable to invest for peak utilization.

The NYSE not only invests for peak utilization, it invests for multiples of peak utilization. It's by no means a prescription for great profitability, it's simply the best way we know how to operate a market which has zero tolerance for down time, and whose operating performance is the standard around the world.

Because underinvesting and capacity reliability is simply not an option for the New York Stock Exchange.

Thank you, Mr. Chairman.

[The prepared statement of Robert G. Britz can be found on page 74 in the appendix.]

Chairman BAKER. Thank you, Mr. Britz. I appreciate your appearance here this morning.

Our next witness, representing Charles Schwab, is Executive Vice President, Ms. Carrie Dwyer.

Welcome, Ms. Dwyer.

STATEMENT OF CARRIE E. DWYER, GENERAL COUNSEL AND EXECUTIVE VICE PRESIDENT, CHARLES SCHWAB CORPORATION

Ms. DWYER. Thank you, Chairman Baker, Vice Chairman Ney, Congressman Kanjorski, and Chairman Oxley, distinguished Members of the subcommittee.

I am Carrie Dwyer. I am General Counsel and Executive Vice President of Charles Schwab, one of the world's largest financial services firms. I'm pleased to be here today to present Schwab's views on market data.

As you may be aware, in many ways, the dialogue we are having today was launched in June of 1999 when my firm submitted a formal petition to the SEC to review and correct what we believed to be an unreasonable and discriminatory market data fee structure.

The process since then, which has included an SEC concept release, and formation of the SEC Advisory Committee on Market Information, on which I sit, has seen an emerging consensus that the current system is flawed, but deep divisions over what the appropriate solution should be.

For that reason, I am pleased that Congress, this subcommittee in particular, is taking an active interest in monitoring this issue. We believe that the need for reform of the market data system is driven by two things, and they've been referred to already in this hearing:

The advent of technology that lets us give more information to more people in more ways, and the simple change in the end user of market data since the system was created 25 years ago.

The exchanges do not manufacture data. The source of that news is not the stock markets, themselves, but the investment decisions of millions of people trading around the world in a diverse group of markets.

Yet, despite the increased breadth of participation, all the information about prices is still funneled through the same small group of markets that were in place 25 years ago.

This group still controls the format, the speed, who can receive it and how much it costs. From them, investors must buy back their own information at a market not subject to competition.

As more Americans have invested in the stock market, more people check their portfolios more often. The internet has facilitated this. No longer required to have a conversation with a broker, an individual can hit the "refresh" button on his computer 10, 20, 50 times a day to see the latest information.

With automated access to brokerage firms by wireless internet, a customer can check her IRA while walking down the sidewalk, if she chooses.

Our own internal research found that in the days when our customers relied primarily on telephone orders, they asked for and the firm bought about ten quotes for every trade.

With online trading, Schwab buys in the range of 75 quotes per trade. While we encourage this trend, because it gives investors more knowledge, it also makes clear the dramatic impact online investing has had on market data revenue.

Market data fees represent such a significant amount of revenue for the exchanges, that discussions about opening the system to competition become, understandably, very difficult.

Certainly cost is important, but there are other problems with the monopoly structure. The rules are made by exchanges alone; other participants don't really have a say. There is nowhere else to buy market data so market incentives don't apply.

Under the current structure, market data is available in only a few limited formats. The creation of value-added data products has been slow and marked by competitive battles.

In addition, the exchanges impose onerous administrative burdens on vendors and brokers. We must count every customer quote request and count for each type of end user to the exchanges.

Every one of our millions of customers with web access must click through a different subscriber agreement for each exchange.

We must seek and obtain prior approval of any new or innovative way to deliver market data.

Pricing changes are often made through pilot programs that can circumvent SEC's and public scrutiny.

I'm not here today to propose a specific remedy, either legislative or regulatory. I do believe, however, that a plan for market data reform must have at its core four guiding principles:

First, any reform must promote competition. Competition at all levels of the market data system will foster innovation leading to the creation of market data products that better serve the needs of today's investors. That competition should be fair. Anyone wishing

to compete to provide market data should ensure that access is on fair, reasonable, and nondiscriminatory terms.

Second, reform must ensure that no one has ownership over market data. The last several years, the exchanges have been advocating database protection legislation on Capitol Hill that would give them an historical property right over data. But market information is a set of facts, plain and simple: bids, offers, limit orders, last sale prices. No one can own these facts. Granting market data ownership or copyright protection to any one party would be antithetical to the very purposes of the National Market System.

Third, the market data system must become more transparent. Market data fees should be set in the sunshine. Greater transparencies of the fees, costs, contracts, policies relative to the collection and dissemination of market data is essential to creating a fair and open system.

Yes, the basic contracts of fee schedules are freely available on the websites, but each of us negotiates our own contracts with the exchange, one by one. We worry about side agreements, especially negotiated rates, offsets of other exchange fees, and pilot programs.

We've been the beneficiary of some of these, but that doesn't make it fair. Transparency is the hallmark of our markets; so should it be the hallmark of our market information system.

Finally, reform must result in a level playing field, ensuring the broadest possible access to market data is essential to the protection of investors and the fairness of our markets.

Individual investors must be able to access critical market information at the same time and on the same terms as large institutional investors and other market participants.

One way to ensure fairness would be most-favored-nation pricing. If you sell it, everyone must get the best price.

Mr. Chairman, the debate over market data is a complex one, but the reality is this; our markets have changed. It's time to reevaluate the entire framework by which market information is made available to investors, end the monopolies and create a new system based on fairness and competition.

Thank you very much for the opportunity to testify, and I'd be happy to answer any questions later.

[The prepared statement of Carrie E. Dwyer can be found on page 126 in the appendix.]

Chairman BAKER. Thank you, Ms. Dwyer.

Our next witness is the CEO of Archipelago Holdings, Mr. Gerald Putnam.

Welcome, Mr. Putnam.

STATEMENT OF GERALD D. PUTNAM, JR., CHAIRMAN AND CHIEF EXECUTIVE OFFICER, ARCHIPELAGO HOLDINGS, L.L.C.

Mr. PUTNAM. Good morning, Chairman Baker, Chairman Oxley, Vice Chairman Ney, and Ranking Member Kanjorski.

Chairman BAKER. And you'll need to pull that mike pretty close. They're not that sensitive.

Mr. PUTNAM. OK.

In late 1996, I founded Archipelago, along with software developers MarrGwen and Stuart Townsend.

Today, it's a leading electronic communications network or ECN, whose owners include Goldman Sachs, E*Trade, J.P. Morgan-Chase, Instinet, Merrill Lynch, and CNBC.

Archipelago serves a diverse client base and executes upward of 140 million shares per day or roughly 6 percent of NASDAQ's volume.

Late last year, Archipelago entered into a business alliance with the Pacific Stock Exchange to create the Archipelago Exchange, the first fully open, electronic national securities exchange for both listed and over-the-counter securities.

The Archipelago Exchange will be fully integrated into the National Market System and will compete toe-to-toe with the New York Stock Exchange, the American Stock Exchange, and NASDAQ.

Our trading rules, which reflect market structure of the exchange were published in the *Federal Register* by the Securities and Exchange Commission in December of 2000, and we recently submitted our responses to the SEC to comment letters on our rules.

In the end, with plenty of elbow grease and some good fortune, we trust the Archipelago Exchange will be the first for-profit, technology-driven exchange that levels the playing field for all investors by combining greater transparency, faster speed, and lower cost.

Former SEC Chairman Arthur Levitt has called market data the "lifeblood of markets." Today, market data in our equity markets is governed and controlled by a Government-mandated, anachronistic, and static structure: the National Market System Plans. Although organized with good intentions and noble purpose, we respectfully submit that the NMS Plans, the CTA/CQ Plan for listed securities and the OTC/UTP Plan for NASDAQ securities, must be fundamentally improved.

Why? Because the plans are exclusive providers. Any vendor or broker-dealer that supplies data to the investing public must contract with the plans. Further, the plans engage in ratemaking, albeit subject to SEC oversight. Surely, the words "exclusive" and "ratemaking" sound funny and out of place in a world that has so benefited from prudent deregulation.

Market forces neither impact the plans nor provide incentives to offer competitive rates. Instead, vendors and broker/dealers are presented with the classic Hobson's choice: doing business based on monopolistic terms or not doing business at all.

In this sub-competitive environment, valuable market data is sold to vendors and broker/dealers and then distributed to millions of retail and institutional investors, forcing investors to pick up the tab for non-competitive pricing.

Without competitive forces to discipline markets, economic distortions result. No one really knows if market data fees are too high or too low.

What we do know is that they're not tied to value. More troubling is that innovation within the market for data provision is not rewarded. Exchanges have little incentive to bring innovative data products to the market, because data dissemination is regulated by the "Vendor Display Rule," a one-size-fits-all mandate.

The Archipelago Exchange is currently negotiating with the National Market System Plans, in essence, to join the fraternity. Absent initiation, Archipelago cannot do business as an exchange.

Ironically, the most difficult task about creating a new exchange isn't the enormous time and expense of drafting 700 pages of rules, or responding to public comments or regulators and clients about your market structure.

No, the most difficult hurdle or barrier to entry is the hazing process that a new entrant must endure to join the NMS fraternity, which is composed exclusively of competitors.

As with all frats, a single blackball veto right is part of the governing rules. And we have experienced dealing with the NMS recently.

A recent example: our staff was recently told by the staff of the New York Stock Exchange that the exchange interprets the ITS Plan to severely limit the ability of participants to use computers to place its orders into ITS.

The New York Stock Exchange strongly suggested we change our market structure to include a time probe, where the Archipelago Exchange would delay accessing other markets to hold that order up for a predetermined time, such as 15 or 30 seconds. The purpose of this holdup would be to allow the marketmaker to manually interact with the order.

We believe that we do probe our market, but we do it electronically. Think of it in these terms. Suppose American Airlines, through the authority of the FAA, informed United Airlines that it would no longer be in regulatory compliance if United's pilots use computer autopilot, because American's pilots chose not to use it. "You're out of business, United, unless you do it American's way."

Can anyone name another industry with this type of never ending hell week initiation is imposed as a precondition of joining?

We respectfully suggest an overhaul to the current system where sunshine is cast on "ancient fraternal rights" and competition is injected to allow market forces to play a central role in the collection and dissemination of market data.

Some observations and suggestions:

First, competition among marketplaces must replace ratemaking by a committee of competitors to provide value, and vendors must be allowed to pay for data based on value. Instead for forcing vendors to contract with NMS utilities, allow vendors to contract with any number marketplaces directly and let marketplaces sell data to vendors at prices that the market will bear.

Second, the type of data that a marketplace can sell to a vendor should not be regulated. Rules that prevent or disincent a marketplace from providing additional value such as full depth of book, have no place in securities regulation.

Third, while we are true believers of competition in the data market area, prudence suggests a transition period under which the NMS utilities would continue to function. These utilities can help ensure a soft landing as we move to a competitive model so that consolidated information is not lost before new competitors have had an opportunity to build their business.

We expect the NMS utilities to wither on the vine as more in-depth competitors enter the marketplace.

Finally, NMS Plan participants should be barred from using fraternity rules as a license to affect the business model or value proposition of new entrants. Such participants must be continually mindful of their mandate in no way includes determining the market structure of new exchanges.

If necessary, the plan should take action to change their governance to reduce the potential for conflicts of interest. The SEC must be vigilant in protecting against the misuse of NMS Plans to deny investors innovative marketplaces. Thank you.

[The prepared statement of Gerald D. Putnam, Jr. can be found on page 208 in the appendix.]

Chairman BAKER: Thank you, Mr. Putnam.

Our next witness is the Executive Vice President and General Counsel of the NASDAQ Stock Market, Mr. Edward Knight.

Welcome, Mr. Knight.

STATEMENT OF EDWARD S. KNIGHT, EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL, NASDAQ STOCK MARKET

Mr. KNIGHT. Thank you, Mr. Chairman. It is a pleasure to be here. And thank you Members of the subcommittee.

Obviously, this is a very complex subject. We could spend hours describing the rules that apply here, how the market works.

What I'd like to do is just try to make a few basic points about how NASDAQ approaches this issue.

In particular, I call your attention to a white paper that we attached to my testimony today which outlines, in some detail, the recommendations NASDAQ has made to the Seligman Committee, which is looking at this issue on behalf of the SEC. It's chaired by a distinguished professor of law who is considered one of the leading experts in securities law, and we and many on this panel have been working with that committee to try to come up with new solutions to this issue.

In particular, though, the topic of this hearing today, Competition and Transparency, are two issues that we take very seriously at NASDAQ and which frankly we believe are at the heart of the success that we've had over the past few years.

I would like to focus on what we consider seven key issues and facts, if you will, that frame our thinking in this area.

First, in terms of the history of our market, the NASDAQ Stock Market is what it is today because of the very intense competition between various stock markets and, because of our focus at NASDAQ on transparency or the wide dissemination of information to the public as the best method for us to compete.

Because of this single-minded emphasis on transparency, we believe that NASDAQ delivers the highest quality market to the investing public today.

Others at this table have other views.

We're out there competing every day about our market. If we can continue to deliver such transparency and quality, the investor will return tomorrow. That's the test, quality every day, and we focus on it day in and day out.

Second, I need not remind you that just 30 years ago, we were a tiny part of the U.S. economy, an insignificant part of the process of price discovery.

Today, we are the largest electronic, screen-based market in the world, listing over five thousand companies. In the last 15 years, we have facilitated the raising of over $480 billion for companies with employees in each of your districts.

This has not been an accident that we grew. More than anything else, our growth happened because we try to think first about the individual investor and their needs.

That is why we get 40 million hits a day on NASDAQ.com, our website. That is why the individual investor pays only one dollar a month to get an unlimited number of real-time quotes and trade information.

You only need to compare that with, for instance, your internet providers monthly bill of $21.95 to understand our commitment to getting information to the American investing public.

Or compare our one dollar for an unlimited number of transactions to the $1.50 for a customer to get access to his or her money through an ATM machine.

In fact, an investor need only click on NASDAQ.com or any of hundreds of other websites and get 15-minute delayed information for free. That is one reason why most investors pay nothing for their market data.

Our belief in transparency can also be found in how we sell our information products to the investing public. Just click on NASDAQ.com, which I did last night and printed out what is on that page.

It lists all our data policies, our pricing policies on data, the market vendors, the agreements. It is all there on our website on trader.com, and the list of prices have undergone a rapid reduction over the last few years, a 50 to 80 percent reduction in our most critical fees.

And, as I said, it's right there on our website.

We understand that one of the critical reasons why so many individual investors have invested in NASDAQ stocks is the ease with which they can access information about our market.

We're not standing still with this. We are looking for ways to improve our market and in January, with the support of many Members of Congress, the SEC unanimously approved SuperMontage, the next generation of the open access, fully transparent NASDAQ stock market.

We're making substantial new investments in this technology. It won't be easy to build. It will cost hundreds of millions of dollars. But in the end, we believe the U.S. investor and the U.S. economy will benefit.

Fourth, you need to focus, I would respectfully suggest, on the fact that certain market participants have decided that to attract more customers, they need to offer information from our market for free. That is their choice, and they make up that cost in other services and fees.

But a choice of a particular business model by one or a group of competitors should not drive important aspects of economic policy or market structure in one direction or another.

Fifth, the value of our market data cannot be divorced from the quality of our market and what the market delivers. Market data value is inextricably tied to market structure, to our technological

efficiency of our market platform, to the quality of our surveillance and regulation, the quality of the companies on our market.

Attached to my testimony is an exhibit which describes in detail where we believe we add value to market data.

The SEC put it this way in its Market Data Concept Release, and I quote:

"Information is worthless if it is cut off during a systems outage, tainted by fraud or manipulation, or simply fails to reflect accurately the buying and selling interests in a security. Consequently, there is a direct connection between the value of a market's information and the resources allowed to operating and regulating that market."

Sixth, the process of establishing fees for market data is fair and it protects the public interest. Let me just briefly describe it. There is another chart which lays it out in detail in a graphic attached to my testimony.

At a minimum, before we can charge a fee, we must submit our fee proposals to an outside advisory committee and then to our board, where I may point out that Schwab has an executive who sits on NASDAQ's board.

We must have at least one-half of its members drawn from representatives of the public or non-industry groups as a matter of law. Once we have received these approvals, we then must submit that to the SEC for approval, and they notice the public fully about this, and the public has an opportunity to comment.

This is a time-consuming and difficult process.

Chairman BAKER. Can you begin your summation, sir?

Mr. KNIGHT. Yes.

Chairman BAKER. Thank you.

Mr. KNIGHT. Finally, I would point out what I started with, which is that we are proposing significant changes in the current system. We have described those in the Seligman Committee white paper. We believe they will bring more competition to this process, but we ask the subcommittee, look at what these markets have delivered to the American economy and the American public in terms of growth over the last few decades.

Thank you very much.

[The prepared statement of Edward S. Knight can be found on page 133 in the appendix.]

Chairman BAKER. Thank you very much, Mr. Knight.

Our final witness, representing Bloomberg Financial Markets, is Mr. Stuart Bell.

Welcome, Mr. Bell.

STATEMENT OF STUART BELL, BLOOMBERG FINANCIAL MARKETS

Mr. BELL. Thank you, Mr. Chairman.

Mr. Chairman and Members of the subcommittee, my name is Stuart Bell and I'm pleased to have the opportunity to testify on behalf of Bloomberg Financial Markets regarding the critical issue of access to market data.

Bloomberg Financial Markets provides multimedia, analytical and news services to more than 150,000 terminals used by 350,000 financial professionals in 100 countries worldwide.

Bloomberg tracks more than 135,000 equity securities in 85 countries, more than 50,000 companies trading on 82 exchanges, and more than three million corporate and municipal bonds.

Our clients include most of the world's central banks, as well as institutional investors and broker/dealers, commercial banks, and U.S. Government agencies.

Bloomberg Financial Markets also provides the services of Bloomberg Tradebook, an electronic agency broker serving institutional investor and other broker/dealers. Bloomberg Tradebook is one of the largest electronic communications networks, regularly matching orders in excess of 100 million shares daily.

In short, as both a vendor and an ECN, Bloomberg is acutely aware of the critical importance to investors and the markets of access to market data.

And as Chairman Oxley reinforced today, this data is the oxygen of the market. Like oxygen, it is essential; unlike oxygen, it is not free.

It defies basic economics to argue in any business context that in excess of $400 million in fees annually can be levied without the lion's share of those costs ultimately being passed on to the consumers and investors.

As you know, before the 1970s, no statute or SEC rule required self-regulatory organizations, SROs, to disseminate market information to the public. Indeed, the New York Stock Exchange, which operated the largest stock market, severely restricted public access to market information, particularly its' quotations.

Markets and investors suffered from this lack of transparency.

The Congress responded by enacting the Securities Acts Amendments of 1975, facilitating the creation of a national market system for securities with market participants required to provide for each security which in turn was to be consolidated into a single stream of information disseminated to the public.

The Congress clearly recognized the dangers of data processing monopolies. To protect the public, the Congress envisioned that securities information processors would be regulated in the same strict way as public utilities are regulated, so as to avoid abuse and undue expense, and to increase price transparency.

The potential for abuse of that monopoly status looms larger today than it did in 1975. At present, most SROs are non-profit organizations. The NASDAQ, however, has largely completed its privatization of NASDAQ and it may well be that other privatizations will follow.

Non-profit SROs have exploited the opportunity to subsidize their other costs through market information fees. As for-profit entities, the incentive will be even stronger to exploit this Government sponsored monopoly over market data by charging excessive rates and using those monopoly rents to subsidize their competitive businesses.

This threatens to hurt investors and compromise the efficiency of the markets in many ways. Investors will be forced to pay excessive monopoly rents for market data. Investors will be denied a level playing field that would otherwise exist in the absence of those monopoly subsidies.

Investors will also lose as major market players, comfortable as Government sponsored monopolies fail to innovate, leaving American markets vulnerable to future off-shore competition.

Recent regulatory developments in the corporate and municipal bond markets underscore the absence of an economically efficient policy on market data that would benefit markets and investors and raise concerns regarding the possible resolution of these issues in the equities market.

A little over a year ago, the NASD, operating through its' wholly-owned subsidiary, NASDAQ, filed a proposed rule change with the SEC to create a corporate bond trading, reporting and comparison entry service, the TRACE proposal.

As approved a few weeks ago, the proposal creates a Government sponsored monopoly in bond data, just when NASDAQ has been transformed into a privately owned, for-profit entity.

Under the TRACE proposal, the SEC has granted the NASD an exclusive franchise by mandating, with only limited exceptions, that all NASD members report their corporate bond transactions to the NASD.

Is a de facto monopoly in this field necessary? The answer is a resounding NO. Credible, highly capitalized market participants are ready to consolidate bond market data if competition is permitted to replace a Government sponsored monopoly in this area.

Numerous market participants filed comment letters asserting that open network technology has made it possible to collect and disseminate price information without a central monopoly provider.

Indeed, Bloomberg and the Philadelphia Stock Exchange have actually made such a proposal.

The current debate over the nationally recognized municipal securities information repository, or NRMSIR, raises similar troubling issues.

The Municipal Securities Rulemaking Board, the MSRB, recently proposed, for example, that all the NRMSIRs give to the MSRB all the data they had independently gathered, sorted, and analyzed.

While billed as a voluntary initiative, it is disconcerting that the MSRB would argue that compilations of data gathered after enormous expenditures of private time and money should be considered free for the taking.

In conclusion, the current market data policy in the United States, on both the equity and bond sides, does not promote competitive market forces which would benefit investors and markets. Bedrock changes in our markets over the past quarter century demand a thorough congressional re-examination of the 1975 amendments, including the provisions on market data.

We believe the competitive provision of market data should be encouraged to the maximum extent possible. The greater the transparency, the greater the opportunity to unleash market forces for the benefit of investors.

Thank you.

[The prepared statement of Stuart Bell can be found on page 178 in the appendix.]

Chairman BAKER. Thank you, Mr. Bell. We appreciate your participation.

Mr. Britz, I will start my questions with you with a couple of statements, one with regard to the reading of the 1975 Amendments and the requirement to provide information on a fair, reasonable, and non-discriminatory basis.

I understand there is considerable discussion as to whether the intent of Congress at that time was to ensure that the information was provided on a cost reimbursement basis to the providers or whether, in fact, it was intended to be the significant revenue stream which, in fact, it has become today to the various exchanges.

I tend to lean toward the side, given the importance of this technology, that it is something that should be provided at the lowest possible cost without net loss to the exchange.

Second, in discussion with Chairman Greenspan a few days ago in another committee hearing, I asked the question of the Chairman relative to the transparency of markets and disclosure of information. How should we view this commodity in the current construct of the market?

To which he responded, "I think with technology accelerating as it has over the past 5 to 7 years, we've seen a more rapid response."

Indeed, that's the issue which I was speaking to earlier, meaning transparency.

The issue of disclosure gets down to the conflict between the obvious necessity of transparency, as you have put it, and the question of property rights.

Because one of the reasons why you get a lot of disinclination on the part of various players not to want to disclose is they presume that what they have is a vested property right, skipping over.

And I think it necessary to make the judgment, do they have the right to that float, as he calls it, whether it's information market data, or otherwise.

And in most instances, I think you're going to find that the answer is no.

In the course of your description of your activity, you indicated that today it is your belief, I think—and I'm asking for clarification—that the net cost to the exchange in providing market data today is a very expensive proposition.

Can you tell me that you have identified a cost allocation to your operation for the provision of market data to customers, and if so, what relationship does that cost basis have to the fee currently assessed?

Mr. BRITZ. Mr. Chairman, it's very difficult to make some of these arcane allocations and decisions when you have joint products.

Economists would describe the production of market data, on the one hand, and the execution of two or more investors' transactions, as joint products.

What are we really doing? Are we executing investors orders and the price is a byproduct?

Or is, in fact, the execution the byproduct and the price is the real product?

What I can tell you, even being rusty viz a viz my old cost accounting days, is that when you look at the cost that the stock ex-

change has in terms of both executing that transaction and the production of market data, which are very difficult to separate, the cost of that activity exceed the revenues to the stock exchange of both market data revenues and transaction charges.

So, as rusty as I am on cost accounting, even I can very quickly come to the conclusion that market data at the New York Stock Exchange—and I'm emphasizing NYSE—operates at a significant loss.

In your comment, you talked about not operating at a net loss to marketplaces. Today, we already operate at a net loss.

We actually have somewhat mixed feelings.

Chairman BAKER. Let me jump to that point. If we can't allocate a specific cost to the activity because it's inherent with the transactional side, how can we state that we know we're operating at a loss if we haven't got a cost center identified?

Mr. BRITZ. Because, first of all, you can make those allocations, Mr. Chairman, but I would suggest to you that they would make the current debate and discussion of market data pale in comparison.

Chairman BAKER. Let me do this, and I don't want to cut you off, but I have to, because I'm going to hold a 5-minute rule here and I'm just about out of breath.

My point is, is you can't specifically allocate the cost, what relevance is there then to the board's consideration of fee reduction. It would have to be to your overall revenue stream and not to the fixed-base cost of the activity which creates this problem for me.

This subcommittee's very intent on seeing a fee reduction on the Section 31 side, because we've identified on the SEC side that the charges related to service are far outstripped by the fees being generated.

So we're going to take, I think, action on this subcommittee to reduce fees, because it's inappropriate to the level of charge, Section 6, 14, 15, 31, whatever we do, based on that presumption, which I assume that New York and NASDAQ exchanges would strongly support.

But at the same time, we're looking at this issue and saying that there's no relevance between the fee being charged and the actual cost of the operation, and therein is my difficulty with the subject.

Mr. BRITZ. What I meant to say, Mr. Chairman, is that if you are to separate the joint products, order execution and production of market data, it inevitably involves somewhat arbitrary allocations.

But there's no question that putting the two together, the cost of producing the execution and producing the market data in total exceeds the cost recovery, so there's no question but that each of them independently operates at a loss and combined. The only difficulty is getting into making some of those arcane allocations.

Chairman BAKER. Well, I understand that there is arbitrariness in the decision process. There may be information that could be made available to us to help better understand, but at the moment, it's a difficult matter to sort out and I think I'll have more to say at a later time.

I recognize Mr. Kanjorski.

Mr. KANJORSKI. Thank you, Mr. Chairman.

Let me first understand this question of transparency. I guess it is a 4-to-2 difference here as to those four witnesses that want to be in a competitive situation of providing this information and the two representatives from the exchanges.

The four of you, do you think you get all the transparency you need? Is that what you are worried about? Or is it the contract costs for acquiring it from the exchanges?

Ms. Dwyer, maybe you should take the first shot.

Ms. DWYER. OK. Let me just ask you to restate your question so I make sure I understand it.

Mr. KANJORSKI. Is it a question of not getting adequate information in time, or is it a question of having to pay for the information you are getting from the exchanges?

In other words, if we find another way to pay for it, are you satisfied that you will not want any other changes?

Ms. DWYER. I think that pricing is going to be a function of how prices are set.

And our major concern over the past several years, due to a variety of experiences we, as a firm, have had with the cost of market data, have led us to the belief that the setting of the prices, transparency of that process, the cost inherent in that process, is more important to fix than the actual level of price of the data itself.

Mr. KANJORSKI. So, you basically want the data so that you can analyze whether it is an adequate reflection of real price?

Ms. DWYER. We think sunshine, we think the whole industry needs to see what each is paying for market data and why.

Mr. KANJORSKI. Make the assumption that none of you had to pay for the data and that it was absolutely free. Would this be acceptable to you? Or is there a lack of transparency in the system that now inhibits your activities individually?

Ms. DWYER. Well, if the data could be free, and I don't believe there is a free lunch anywhere, then I don't suppose it would be very relevant how the CTA collected and consolidated, as long as they were doing a good job in ensuring accurate data.

Mr. KANJORSKI. In other words, with the standard out there by the exchanges, you are getting adequate information. Your complaint is that you have to pay for it, and you have to pay by some arbitrary contract that may not be equal to what your competitor has to pay. Is that correct?

Ms. DWYER. I think we are not concerned that we have to pay for it. We think there's a cost to gathering the data and collecting it. That's never really been the issue.

The question is, what is the cost and how is the system administered.

Mr. KANJORSKI. Right. But you would not care about what those costs would be if it were free to you?

Ms. DWYER. Free, there wouldn't be a cost, so yes.

Mr. KANJORSKI. Well, it would still cost the exchanges.

Ms. DWYER. Well, we recognize that, or to anyone who consolidates data.

Mr. KANJORSKI. So you are really worried about getting this information free. Would that solve everybody's problem, Mr. Bell? Would that solve Bloomberg's problem if we gave it to you free?

Mr. MACDONALD. I'd like to address that, if I could.

Mr. KANJORSKI. Go ahead.

Mr. MACDONALD. Let me give you an example. We do not have transparency today and we need it. The individual investor is discriminated against.

Mr. KANJORSKI. So, getting the information for free would not satisfy you?

Mr. MACDONALD. No.

Mr. KANJORSKI. What do you want?

Mr. MACDONALD. I would like to be able to give real-time streaming quotes to my customers, but there are administrative burdens to that. I mentioned in my testimony that the subscription agreement——

Mr. KANJORSKI. Do you want to tap into the exchange's computers to see exactly what transaction is being processed in real-time as they are apprising you of the information?

Mr. MACDONALD. Yes, I would like my customers to——

Ms. DWYER. We already do that.

Voice. We do that today, Congressman.

Mr. KANJORSKI. OK, then what I am trying to ask is what more can they give you?

Mr. MACDONALD. I actually disagree with that, both on a delayed quote basis. The New York does not, on a delayed basis, give us quote, the bid and the asked. They will only give us the last sale, so I respectfully disagree with that.

Mr. KANJORSKI. So, if you got the bid and the ask price, would you be happy?

Mr. MACDONALD. That would be one thing that would make the playing field level.

Mr. KANJORSKI. OK.

Mr. MACDONALD. The second thing would be, with the innovation with the internet, there are clearly rules that are impeding the innovation, and I have a big problem with that.

Mr. KANJORSKI. So, if we were to lay down some system that says it is free to anybody that wants it, and there are no contracts that you have to enter into, because it is absolutely free and there is no reason to have a contract, are you satisfied?

Mr. MACDONALD. No. There are other rules. I mentioned the way that we have to then obtain subscriptions from customers because there are still some rules in place.

Assuming they went away, all these rules.

Mr. KANJORSKI. Those rules would go away if you did not have individual contracts.

Mr. MACDONALD. My goal is to get the best information to my customers in the best way.

Mr. KANJORSKI. Now to the two exchanges: I know you cannot give us an absolute cost estimate, but it does seem to me that the end product here is a result of the business you are doing. If you did not have the sale, you would not have the information, so there is a way to recapture most of the cost here, and this is sort of an add-on information that you are selling.

But assume that there is—and there is—some cost for it. Can you provide me a ballpark figure on the real cost for the two exchanges on distributing this data information? One-hundred-million dollars? Two-hundred-million dollars?

Mr. BRITZ. No. The cost of production and transaction processing at the New York Stock Exchange is in excess of $400 million.

Mr. KANJORSKI. Four-hundred-million dollars.

So if you had $400 million, you would be happy to give these other four people everything they wanted?

Chairman BAKER. And if I can jump in here, Paul, to help on that point, if it's $400 million, I would hope you would ask him to give us something that says how they allocate those expenditures, and I'll give you a couple more minutes.

Mr. BRITZ. Mr. Chairman, that's in our annual report in the income statement that we produce every year.

Chairman BAKER. So Members of Congress could understand it.

Mr. KANJORSKI. OK. If we could get some sort of cost analysis breakdown, that would be helpful.

Now, let us go to NASDAQ. Do you have an estimate of what it is going to cost?

Mr. KNIGHT. I would answer the question this way, Congressman. We really believe the total operation of the market is, and its integrity is tied directly to the value of the information.

We would allocate all of our costs. It is our market and the fact that the people have interest in that market, that that information has value. We drive orders together. We allow the execution—we create liquidity. That is why the information is valuable.

And Congress requires us and the SEC to meet certain regulatory standards that bring integrity to that information.

Mr. KANJORSKI. But make the assumption that we have the power or could find some way to say this is not your intellectual property—that it is public information and that we can force you to put it out.

What does it cost to distribute that information? What is the loss to the NASDAQ if we do that?

Chairman BAKER. And that has to be his last question and sum up, please.

Mr. KNIGHT. I really don't know, Congressman. I would be guessing and speculating. I would say that all of our costs are focused on delivering a quality market. A quality market is what creates that information.

Chairman BAKER. And let me add on to Mr. Kanjorski's point with my question.

The subcommittee really wants to understand what the costs are that are identifiable associated with this activity if we're to be making an informed judgment.

Mr. Chairman.

Mr. OXLEY. Thank you, Mr. Chairman.

Let me commend the panel for what I think is an excellent presentation and some very good give-and-take, both in their statements, as well as their response to questions.

Let me refer to Mr. MacDonald's testimony, which I think makes an interesting point, and one that I believe really gets at the heart of the matter.

He stated—and I invite all of our witnesses to comment on this—that, "SROs exercise governmental rights to collect market data fees from market participants, and then fund for-profit operations

which compete directly with the market participants from whom they have authority to collect the fees."

Very provocative, very interesting. I suspect that, Mr. Britz, you may have a different cut on that.

But why don't we go down the panel? I'm assuming that Mr. MacDonald still believes what he said a few minutes ago, so we'll skip him and go right down the panel.

Mr. MACDONALD. Even more fervently. I would like to add one other point to that, and there may be another revenue that we have not considered that the exchange is getting when issuers list with the exchange, one of their expectations is that the prices will be shared. So, in fact, that is another contractual issue we should look at and another revenue source.

Mr. OXLEY. Mr. Britz.

Mr. BRITZ. Mr. Chairman, I would go back to what I said earlier. Market data at the New York Stock Exchange operates at a loss and therefore it's in no position to subsidize anything, much less anything that might be competitive with our member firms.

I would add one other point, and I think it's a large point that perhaps is being missed. Market data fees are where they are because it is a consensus of the broker/dealer industry that they be where they are.

We don't see on this panel, Merrill Lynch, Smith Barney, Paine Webber, Prudential Securities, and many, many other firms. I can tell you that by definition, because those fees are where they are, it is the consensus of the brokerage industry, through their representatives on the various SRO boards, that they are about right and that this is an appropriate way to fund the operations of the NYSE, in my particular case.

And they are free, back to the question that was asked earlier, to change or indeed eliminate market data fees any time they care to.

But the effect of eliminating market data fees, which at the New York are at about the $130 million level, gives you $130 million toothache that you then have to find a substitute for. So then the consensus is about, "OK, how do we tax to recover that $130 million? Who are the winners and who are the losers?" And that's a consensus process.

Mr. OXLEY. Ms. Dwyer.

Ms. DWYER. Well, it's absolutely correct that we are required by statute and SEC rules to send all of our customers quote information to the exchanges, even quotes and trades that we do away from the exchange go to the exchange.

Funding the exchange I don't believe was one of the objectives of the 1975 Act amendments. The discussion, as I recall from reading the legislative history around those Acts, were about breaking open the exchanges' single-source monopoly and providing consolidated data. Combining the data streams from all the exchanges, which had been excluded from the kind of public view the New York Stock Exchange had.

So there is language. The statute is ambiguous. There is language about whether the exchange needs to use a cost-based analysis to recover its fees.

But I do not believe you will find anything that indicates it was intended to be a profit center, or that funding the exchange itself was one of the objectives. It has always been a pretty robustly solid financial institution on its own.

I think the point about requiring us to send the data, then marking it back up to us to display it to our customers, one point that has puzzled us is that the exchange and the NASD have announced that they are going to provide market data for free on their websites, which is puzzling in that we need to pay for it. We compete with them on many fronts.

And, you know, we don't understand under the SEC rules or the statute, the ability to provide that data outside the confines of the plan, which the SEC approves, and to give it away for free while, you know, in order for us to provide it for our customers, we have quite a high cost.

Mr. OXLEY. Thank you.

Mr. Putnam. Let's try to make this brief, because we're running out of time.

Mr. PUTNAM. OK. You know, it's funny. We think a big part of the problem is the plans themselves, the plans that were designed to protect investors.

And we strongly support the New York Stock Exchange's effort to break away from the plans and to get into a competitive environment where you can start to get the expenses and revenues in line like a business would, and to allow some other competitors into the marketplace.

What I mean by a problem with the plans, the ECNs, which are very much like exchanges, are providing data for free to Yahoo and Three-D Stock Charts, for example, on the internet, and those bids and offers are made again available for free.

But the plans prevent us, or prohibit us, from actually providing additional information, like last sale information for free. So we think that we need to, as Carrie said, shed some sunlight on the plans, not just in how the pricing is determined, but how the plans operate. Inject some competition into the process and start running these things more like businesses.

Mr. OXLEY. Mr. Knight.

Mr. KNIGHT. Mr. Chairman, we proposed that the plans be changed. We have proposed an alternative we call the Market Choice Alternative which would create alternative mechanisms to create this information and inject more competition into this marketplace.

We're perfectly comfortable with that. We think that's the direction to go. Less regulation is what's needed here; more competition. And we think there is a way to do that using the existing statutes, and that is an idea that we think will also create the possibility for lower cost to the investor, and more innovation in the types of information that are available to the individual investor.

Mr. OXLEY. Mr. Bell.

Mr. BELL. I guess I would just follow up with what Ms. Dwyer was saying. I think that it is a concern of ours that in this environment where SROs are becoming for-profit organizations, and you have situations like free real-time data on websites that is different

from what we could provide, because we'd have to pay for it, or what I mentioned, the trace situation with corporate bonds.

Again, the NASD and NASDAQ now have a monopoly where there isn't one presently, so I think that's of great concern.

Mr. OXLEY. Thank you, Mr. Chairman.

Chairman BAKER. Thank you, Mr. Chairman, for your participation.

As is the custom, we will recognize Members by seniority on time of arrival on the Democrat side, just so people have a heads up here, the next four folks are Bentsen, Mascara, Sherman, Shows.

On our side, it is Ney, Shays, Royce and Weldon.

Mr. Bentsen.

[No response.]

Chairman BAKER. Mr. Bentsen has gone.

Mr. Mascara.

Mr. MASCARA. Yes. Thank you, Mr. Chairman.

Just a couple of observations. One, it's good to see that the monopolies are alive and well. During the past 6 years with the megamergers, I was going to ask Webster to remove the word "monopoly" from the dictionary, so I'm glad to see that everybody's referring to the New York Stock Exchange as a monopoly.

I'm curious as, in my former life, I did accounting. And I noted, Mr. Britz, you said that it was impossible to ascertain what the costs were.

I mean, having done a little bit of cost accounting at cost centers, somehow you should be able to break down the execution costs and costs of providing the market data.

Are you saying that the New York Stock Exchange does not have the ability of ascertaining that information?

And if so, I suggest you change accounting firms.

But go ahead.

Mr. BRITZ. Congressman, I didn't mean to say impossible. I meant inevitably—cost accounting, as you undoubtedly know, is an art, not a science—it inevitably involves making determinations as to what categories of cost ought to be included and what allocation of those costs you ascribe to market data on the one hand to the execution of the transaction on the other hand, and possible other functions.

You can clearly do it, but it's going to be assumption-driven, and my comment was I think it would raise the decibel level of this debate, the debate over those allocations and those categories of costs. Not at all impossible.

Mr. MASCARA. OK. Because I was going to say, if I'm on the other side, and I see that you have many more people there that oppose those fees, if they're going to be charged a fee, they like to know that it's a fair fee and it is representative of the cost the New York Stock Exchange is absorbing.

So I think they would take more comfort if your answer had been, yes, we can ascertain that and determine it, and these charges are based upon that information.

Mr. BRITZ. I would imagine that's true, Congressman, but I wonder if it's not naive to think there would ever be consensus surrounding those assumptions and those allocation determinations

that have to inevitably be made to produce a profit and loss statement to everyone's satisfaction.

So I'm skeptical that it can happen. It's clearly not impossible to produce a P&L statement.

Mr. MASCARA. The other observation was I would like to have seen someone from the SEC that we could have asked questions of.

And that leads me to the next question, Mr. Britz. I understand that the SEC Advisory Committee on Market Information is currently examining many of the issues that we are discussing here today.

It seems to me that our subcommittee should wait for the recommendations of the experts, whatever that means, on the SEC's Advisory Committee, before considering any legislation on market data.

After all, we are not experts. I'm here exploring new ground for me. But don't you agree that we should review the Advisory Committee's recommendations before determining whether to legislate in this area?

Mr. BRITZ. Well, I would never be so presumptuous as to advise this subcommittee as to what it ought and ought not to do. I would say that the Seligman Committee is 25 professionals from around the securities industry, both the buy and the sell side, various types of broker/dealer firms, not simply one category around that table. The vendor community is around that table, and various academics representing the public are around that table as well, so there certainly is a wealth of expertise around that table.

I don't have the clarity of vision to know what the end product of this committee will be. But I think it will be an interesting and a provocative and thought provoking one.

Mr. MASCARA. Well, thank you, Mr. Britz.

And thank you, Mr. Chairman.

Mr. BAKER. Thank you, Mr. Mascara.

Mr. Ney.

Mr. NEY. Thank you, Mr. Chairman.

The question I had of Mr. Knight.

If we change the market distribution system into a competitive model, would any loss in the total revenues created by restructure of the market data system be passed on to the consumers?

If so, what impact would that have on the investors who invest in the market?

Mr. KNIGHT. If you're asking about our market choice alternative, it's our belief that competitive forces exist now that if the National Market System Plans stepped back and allowed those forces to play out, people would step forward to put together the national best bid and offer, and that other competitors would spring up and that that is the best mechanism to go.

And that that will result in lower prices for the investor for this information, and better information because of innovation and competition. That's a system we're willing to work with.

The existing one is the product of circumstances that may have passed in the 1970s, where this information wasn't coming together. But in the end, people need to recognize the reason the SROs were given the responsibility is because, and explicitly in the statute, Congress had a concern about the integrity of this informa-

tion, and we live under regulatory requirements that broker/dealers and other vendors of information don't have to carry.

Mr. NEY. Well, the SROs could recoup, because they'll be selling the data because the SROs would have a recourse.

I'm just saying though that the consumers and that cost passed down, does that increase costs and how does that affect——

Mr. KNIGHT. I would think that with more competition, the costs would go down.

Mr. NEY. OK.

Mr. BRITZ. Congressman, if I may come at that in a different way. If your question is, in my shorthand, if you vaporize market data fees, will that have an impact on the operations of the exchange, or more importantly the ultimate end customer.

And I don't know the categoric answer to that. But back to the $130 million toothache, water seeks its own level, and the most obvious thing that our board would do, without presuming what they would do, is that they would gravitate toward the transaction charge that both we and the over-the-counter market have.

And that's clearly a charge in the form of brokerage commissions that would inevitably find its way very directly to the end customer.

Mr. NEY. A question of Mr. Putnam.

We're not going to haze you on this question now. I found your testimony very interesting.

The question I had, if we know, change from a monopolistic structure, and the consumer relies on reliability and trustworthiness of data, would there be anything lost due to competition, as far as reliability of data, trustworthiness of data?

Mr. PUTNAM. Well, we've suggested that we take an incremental step initially to protect investors from just that. That we wold maintain the current plans to provide a baseline, a minimum baseline of information, introduce competition to the system, and then hope that the utility died.

If it turned out that market data was a natural monopoly, then we'd have to rely on SEC oversight and antitrust regulation to help determine the outcome on market data pricing. We don't believe that. We believe we're seeing it now.

The New York Stock Exchange is offering more and more, and they're getting ready to offer a lot more information, and I believe competitive forces have driven them there.

The same thing on the ECN side of the marketplace. We're offering information for free to investors, as a way of competing with one another.

So we really think that's the way to get there.

Mr. NEY. So you don't have any hesitations, if this was changed from the current structure, about reliability if it was changed?

Mr. PUTNAM. I think there are other examples in our current market where the SEC mandates a minimum level. So if you have someone who chooses to be a market data consolidator, that they are held to a standard of performance, system reliability, those sort of things, or they wouldn't be able to be a consolidator of data.

I think we can get to it that way.

Mr. NEY. Thank you.

Thank you, Mr. Chairman.

Mr. BAKER. Thank you, Mr. Ney.

Mr. Meeks.

Mr. MEEKS. Thank you, Mr. Chairman.

Let me just ask your indulgence for a second. This is new to me, sitting on this subcommittee, this particular issue.

So let me just ask Mr. MacDonald, first. I just want to be sure that I completely understand and ask you, can you explain to me why transparency in the market information is important, first of all?

Mr. MACDONALD. Well clearly, you want the investor to be informed about the best bid offer. Mr. Meeks, if you called my broker and you got one of my brokers, one of my registered reps on the phone, and asked him for a quote on AOL, he would give that to you for free.

If, Mr. Meeks, you dialed into my website, and attempted to get a quote on AOL, you would effectively pay, either directly or indirectly. Directly, because you've signed a subscription agreement to get unlimited quotes, real-time quotes, for $4 a month. Or because indirectly because I'm paying on a per-quote basis.

So we have a situation that's patently unfair to the individual investors. The system was designed for larger institutions who that sort of cost to them is incidental. It is not incidental to the person who trades periodically once every couple of months.

Mr. MEEKS. Let me next ask then, I briefly read or understand that the SIA Subcommittee had released a report on transparency and made a recommendation or several recommendations.

Now I'm trying to figure out I should ask then Mr. Britz and/or the gentlemen from—Mr. Knight, whether or not, did you participate in that subcommittee's report or in the hearings or anything of that nature, or have any input whatsoever in that report?

Mr. KNIGHT. I don't think we were excluded, but I think it's important to note that that report was not adopted by the SIA, Congressman, in any official way. So I think associating it too much with the position of the SIA would be incorrect.

Mr. BRITZ. Congressman, that report was largely a survey of broker/dealers, so I guess I'm not sure how to answer the question as to whether we participated.

We were aware it was happening. And at the end, we were sent a draft for our comments. So to that extent, yes. But we were not the intended audience of that report.

And I think what Mr. Knight said is absolutely true. That is a report of a subcommittee of the SIA. When that subcommittee asked the board of the SIA to approve that report, the board declined to do so, and effectively distanced itself from that report.

Mr. MEEKS. Either Mr. Britz or Mr. Knight, let me then ask this question, and I think it was somewhat asked, but I'm not clear on the answer.

If say, the current plan structure was completely eliminated, and you, as an individual SRO, were able to sell data individually, how, and could you provide consolidated data and how would you charge for supplying that data?

Mr. KNIGHT. Well, under the plan we submitted to the settlement committee, we believe the competitive forces that exist now, particularly in the information technology area, because of the de-

mand that the consumer has, that they would pull together, that vendors would spring up to pull together that information for the public because of that demand. And we would sell to those vendors.

Those vendors would be subject to certain rules from the SEC. Currently, they are called the Vendor Display Rules, and other mechanisms. But what would happen is there would be competitors also spring up to supply the same information, and we believe that competition would set the price as opposed to the cost-based rate-making or some other Government alternative to setting that price.

We believe that is the better way to go.

Mr. MEEKS. And finally let me ask one of the others, I think I heard someone testify to the fact that one of the drawbacks in the inconsistency of distributing delayed quotes, and mentioned differences between NASDAQ and the New York Stock Exchange.

My question is, if individual SROs could sell their data independently, would you be concerned about greater inconsistencies in the distribution of real-time or delayed quotes?

Mr. BRITZ. Well, first of all, if I may correct something that was said earlier, the New York Stock Exchange does not produce delayed quotations. Nothing leaves the Stock Exchange's factory, as it were, that isn't real-time.

Several intermediaries in the distribution chain, for whatever reason, may choose to delay it along the way, but we're not in the business of delayed quotations. We think that's an inferior product and that's why we've pushed so aggressively to make real-time data more pervasive.

Viz a viz the quality, this is a tough one. I think that from a pure self-interest point of view, the New York Stock Exchange would like to be able to distribute an NYSE-only product.

And indeed, based upon a number of discussions with buy and sell side brokers, there's a demand for that product. But I wonder whether—and the tension here is whether you uncouple New York from Philadelphia and Boston and so on, whether or not there is something that happens there that dilutes the integrity of the product.

And particularly, whether the end users, and I don't worry about the institutional end users, because they'll get the New York product, particularly whether the less sophisticated end user, who may get a secondary market's bid or offer discrete from another bid or offer in the New York, and whether or not the quality of that information product will be up to what the primary market is.

So, Congressman, there is a tension there as between just full and complete competition, unbundling of product, and whether or not you somehow deteriorate the quality of the product to the unsophisticated end user.

Chairman BAKER. Mr. Meeks, your time has expired. Thank you, sir.

Mr. Weldon.

Mr. WELDON. Thank you, Mr. Chairman.

My colleague, Mr. Mascara, asked whether Congress should wait for the SEC's Seligman Committee to produce a report before we act on this issue.

Ms. Dwyer and Mr. Putnam, you are both participants in that committee. Do you believe Congress should not seek to promote

greater transparency in competition in market data dissemination absent the Seligman Committee's report?

Is that committee producing results that you believe will lead to necessary reform?

Could you answer those questions for me?

Ms. DWYER. Sure. We don't know what the committee will recommend at this point. It's still very much involved in a lengthy discussion of what is actually a very, very complex issue, and essentially is operating to pull the views of a group of 27 or so folks each time we meet.

I know that Dean Seligman's committed to producing a report on September 15th, but it's a slow process. I don't see anything wrong. In fact, I wholeheartedly welcome this subcommittee's interest in educating itself about this issue.

Because it is complex, it's not something that anyone would want to act on precipitously, but I don't necessarily—I think the Seligman Committee will probably produce some very interesting results.

I don't know that anyone needs to wait in considering these issues for that to happen.

Mr. PUTNAM. I agree with Carrie. It's difficult, at this point, to tell exactly what's going to come out of the committee and there is still considerable disagreement on what we ought to do.

And I think if we wait until December, to see what the committee produces, and then for this subcommittee to start to act or examine market data, we're just stalling a process that needs to be looked at now.

Mr. WELDON. Thank you.

I just have one other question. The exchanges point out that market data revenues have remained steady as a percentage of total revenues, so why is anybody complaining about excessive market data fees?

And, Ms. Dwyer, maybe you can tackle that one first, and then I'd like to hear Mr. MacDonald's response to that.

Ms. DWYER. Sure. Well, just as Bob has had some difficulty portioning out the costs of market data, I don't know much about the revenue situation at the New York Stock Exchange. But I will say that our market data fees three years ago, when the internet first took off, went from about $7 million a year to all the exchanges, within one year up to almost $20 million, that was due to this increased usage that I talked about before.

Partly due to, I think Schwab can take some credit, also some other people at this table, and people who aren't here.

Due to the consternation of the huge run up in revenues and costs to us, due to the internet usage of individual investors, the rates have come down. And we've had many negotiations with both the plan operators at the CTA Plan, NASDAQ Plan about that.

There has been some accommodation. But in terms of our costs, that has left us basically flat. Because as the costs have come down for individual investor usage, certain kinds of usage, their usage has simply escalated and gone up.

And we are continuing to develop products such as, you know, real-time portfolio monitoring products, streaming quotes and so

forth. As we introduce those, our costs are simply going to continue to escalate.

And I may say that the costs of our brokers, ten thousand brokers at Schwab, who get market data delivered to them on a terminal, those costs have not decreased appreciably at all over the last several years.

And somebody mentioned that as insignificant, but when you have ten thousand brokers, it's not an insignificant amount of money.

Mr. WELDON. Mr. MacDonald, would you like to respond to that?

Mr. MACDONALD. I would. The innovation of the internet has changed the playing field pretty dramatically in the last year or two.

So, the cost that we experience is not a fixed cost. It is a linear cost, and those costs are passed on to our customers.

We, right now, represent one of the lowest price points for customers at eight bucks a trade.

I gave you the example where, in order for you to obtain real-time quotes on an unlimited basis, you have to subscribe at $4 a month.

Half my customers do less than one trade every 2 months. Those customers are, therefore, very disadvantaged.

I have to absorb those costs, and I already produce one of the lowest price points in the industry.

So, these costs to me are linear. They are not fixed. They go up with volume usage.

I think Carrie makes a very good point that the other innovation that is then stifled is, as we start to deliver those products and services that our customers want so they can make more informed decisions—things like real-time charting, real-time portfolio analysis—they are significantly disadvantaged against the institutional investor.

Chairman BAKER. Mr. Weldon, I am sorry, your time has expired, sir.

Mr. WELDON. Thank you, Mr. Chairman.

Chairman BAKER. Thank you, Mr. Weldon.

Mr. Bentsen.

Mr. BENTSEN. Thank you, Mr. Chairman. Mr. Chairman, I apologize for not being here. I had two committee meetings at the same time. Unfortunately, I missed this panel's testimony, and I apologize to you. I look forward to reading your testimony, and I don't have any questions at this time.

Chairman BAKER. Well, thank you, Mr. Bentsen.

Mr. Fossella.

Mr. FOSSELLA. Thank you, Mr. Chairman, and good morning, everyone.

Mr. Britz, you have testified that the New York Stock Exchange wishes to withdraw from the CTA, and I am curious as to what's the motivation. You touched upon it in your testimony, but, if you can expand upon that a little bit, but also what the implications that you see down the road from that decision, how it would work, how it would be structured.

Mr. BRITZ. Well, the overriding implication, I think—and this is perhaps something that the entirety of the panel agrees on—is a more competitive environment.

Congressman, we didn't wake up one day and decide to do this.

The CTA, for whatever reason, has become a magnet for—noise, for lack of a better word.

When that noise comes from a particular broker, or even a couple of brokers, and it is obviously a competitive-positioning kind of noise, we are all big boys and we deal with that.

On the other hand, when the SEC begins to take that so seriously that it issues a concept release on market data, then it raises questions as to whether or not there is a problem with market data, and goes so far as to suggest, if not propose, possible solutions to the problem.

Those solutions look like bandaids rather than a straightforward approach to the real or perceived problem, which is the consortia. There are lots of other reasons, not the least of which is what the SEC and the Justice Department have done recently vis a vis another consortium, the OPRA—Price Reporting Authority.

We became increasingly uncomfortable with our participation going forward in consortia like the CTA.

Very clearly, if there ever was a reward for the New York Stock Exchange—and it is debatable as to whether there ever was—the risk/reward situation is way of out balance. That is what triggered our decision, and, when you understand that we can withdraw—and that is all we are suggesting, by the way. We are not so presumptuous as to suggest a market data landscape for the industry—we simply want to withdraw, and we know we can do that and continue to meet our statutory obligations exactly as written.

That is really what is behind our position.

Mr. FOSSELLA. What do you envision—it seems like you have a problem with the construction. What are the implications as you see them?

Mr. BRITZ. I think it might be as simple as the New York withdrawing and perhaps other markets continuing to band together in organizations like CT, in which case the world will hardly notice.

Certainly, the end customer will never notice. The individual investor or the professional investor hitting the enter key and calling up a bid or an offer will have—will not——

This will be completely invisible to them. I do think, as other commentators have suggested, you'll introduce competition.

Someone raised the issue of value here.

The New York will be able to contract for its own market data, which is a product we have great belief in.

It can be decoupled or uncoupled from other markets. We can get directly and discreetly at the value of that data.

So, I think there are a number of positive benefits. At worst, it will be invisible to the end user. At best, it will have positive benefits.

Mr. FOSSELLA. Two questions, because I know my time is limited, so I will throw one first at Mr. Putnam.

In your testimony, you recommend a soft landing. I would like for you to expand a little bit as to where the airport is, for example, in your opinion, and how this soft landing would take place.

Then, I am still a little confused, which is not abnormal, on this whole issue where one side says "costs of market data have dropped dramatically and precipitously in decrease." The other side is saying "we haven't seen the benefit of those lower costs and investors are still paying."

I am trying to figure out where the money is going, if I can do that.

Mr. PUTNAM. We think the reason to take an incremental step is, in the interest of investor protection, you should——

One, brokers need to know what the best bid and offer is across competing marketplaces in order to fulfill their best execution obligations.

So, in order to guarantee or preserve that—I think I am agreeing certainly with what Bob is saying, is that keeping the exchanges staying on the current system is a way of guaranteeing that the best bid and offer is available.

Last-sale information is a good idea. We introduce, at the same time, competition so that New York, ourselves, NASDAQ is free to go and contract with other vendors or to provide the data directly themselves.

That will introduce competition into the system, and then we no longer have to keep the utility that was created in the 1970s in place.

Then, ultimately, that will get us to where we will start to competitive price market data.

As far as commenting on the cost of the data and the cost to the end user, it is really not my area of the marketplace. We generate market data.

Mr. FOSSELLA. That second question was to sort of anybody else who has heard somebody else comment on fees going down, but costs either remaining the same or——

Chairman BAKER. If we can get a single panelist to respond to that.

That wraps up your time, Mr. Fossella. Anybody choose to respond to this?

Ms. DWYER. I'd be happy to respond to it in case I was unclear before.

Some of the fees have been reduced. There are—You know, you would have to see the fee schedule.

They are very complicated schedules around this. An individual retail customer could choose to subscribe and pay a set fee, as was referred to by Randy.

They can pay on a per-quote basis. There are a variety of ways of delivering data to customers.

They are all priced differently. Some of those have, indeed, gone down quite dramatically over the last couple of years.

But, at the same time, their quote consumption, has gone up geometrically and will continue to do so as people become more and more used to using real-time data.

If they can have it, they want it. They don't want 20-minute delayed quotes.

The New York Stock Exchange used to be in the business of selling those.

They realized several years ago that there is no value in that, and more and more investors are wanting to not look at what their portfolio was like 20 minutes ago, but what it is like right now, especially on a day like today, you can imagine.

So, the cost of providing that even at a lower rate continues to escalate for a firm like ours.

Mr. FOSSELLA. I think I am a little more clear. Thank you very much.

Chairman BAKER. Thank you, Mr. Fossella.

Ms. Jones.

Ms. JONES. Like my colleagues, we—thank you, Mr. Chairman—we all have a number of other committee meetings, and we ran in and out.

What I didn't hear—and I was trying to flip through your testimony—is what do they do in other parts of the world to deal with this subject matter?

What kind of costs do they have? Is there anything going on somewhere else in the world that we ought to copy?

Anyone can kind of respond to that. Did I miss that? We haven't talked about that? Good, OK.

Mr. BRITZ. They actually do very similar things. I didn't bring it with me. I wish I had and would be happy to supply it to the subcommittee.

The Federation of International Stock Exchanges—FIBV—publishes a report on a great many subjects including market data, prices, and fees, and revenues and such.

You have to look down that column of worldwide stock exchanges for quite a long time before you get to the CT/New York Stock Exchange level of price.

It is in descending order by price. I should have said that straight away.

The simple answer to your question is that they do very much like what we do here in the States.

But, the data worldwide is dramatically more expensive than it is in the States.

Ms. DWYER. May I also add I think that would be a very interesting set of issues for the committee to look at.

I think there are some markets that are moving toward a free model.

I would point out here in the United States the ECNs which are the newest kind of stock market that we have. The majority, if not all, including one that Schwab created a few years ago, give away market data for free.

We see it as advertising, like, when you walk into WalMart, you are not charged to look at the prices on the cereal boxes.

We think it generates business to give it away for free, so we set it up that way, so that would also be something to factor in.

Mr. MACDONALD. With regard to the costs, one of the recent impositions on the industry—and it was a fairly expensive one to put in place—was the OATS System, which is basically an auditing system so that you know, from cradle to heaven, what has happened to a transaction.

So, I would ask New York and NASDAQ to speak, that when they talk about cost allocation, I would suggest that we have a very robust, very expensive system to keep track of those things.

Ms. JONES. What would you propose as an alternative to that system from cradle to—whatever the other word you used?

Mr. MACDONALD. I think the systems in place, I think, it is extremely robust.

The point is simply there is a great auditing system for getting at the real cost of this.

I think that the technology that we have arrived at here in the United States—we are very technologically proficient in these markets—one would argue that those costs should plummet as we become that technologically proficient.

Mr. KNIGHT. I would just confirm that our data also shows that the cost overseas, a place like London, for instance, is much higher than here in the United States for similar information.

Ms. JONES. I yield back my time.

Chairman BAKER. Thank you, Ms. Jones.

Mr. Shays.

Mr. SHAYS. Thank you, Mr. Chairman.

Mr. Chairman, as a new Member, I want to thank you for holding this hearing and also thank all our witnesses. It is very enlightening to me, and I would say just up front I will probably expose my ignorance, but, hopefully, by the time I have to make decisions I won't be.

I am struck by the fact—I bring to the table a general view that, if you don't have competition, you have regulation.

But, the last thing I like seeing is regulation, and I think there is a general consensus that change has to take place.

My question to the panel is, basically, is this change going to have to take place through legislation, through some decisions by the SEC, or will you all be able to work it out among yourselves?

Mr. MACDONALD. I'll tackle that one. The SEC has authority in this case.

We are supporting that there be a piece of legislation that Congress do mandate that there should be blue sky, that we understand better what the costs and the revenues are.

If there are excess revenues, then what has happened to those excess revenues?

Are they going to build in competitive systems that will compete with market participants?

Mr. SHAYS. Mr. Britz, will you——

Mr. BRITZ. Congressman, I am perhaps one of the few non-lawyers in the room, so I won't comment on what has to happen from a legal——

Mr. SHAYS. That makes you first among equals.

Mr. BRITZ. I won't comment what needs to happen from a legal-process point of view. But, I would tell you that——

Mr. SHAYS. I didn't ask what needs to happen. I need to know what the mechanism is. Is it going to be worked out amongst you?

Mr. BRITZ. We will have shortly before the Securities and Exchange Commission a petition for the New York Stock Exchange to withdraw from the Consolidated Tape Association.

I have no idea what they will do with that petition. They, in fact, may hold it pending the deliberations of the Seligman Committee, and so on.

But, if they were to acknowledge that we have provided them or will have provided them with a plan that comports with all of our requirements vis a vis consolidation and disclosure, and certainly the existing CT/CQ plans allow participants to withdraw.

Mr. SHAYS. This sounds like a more confusing answer than most lawyers would give me with regard to this.

Mr. BRITZ. OK, sorry. If we withdraw from the CTA, it may be the spark that gets you to a more competitive environment.

Mr. SHAYS. Thank you.

Ms. Dwyer. Anybody else care to answer?

Ms. DWYER. Yes, I would just say I think even the Seligman Committee is the——

Some of the things we are talking about would require legislation. Unfortunately, 25 years ago, when Congress looked at this issue, it crafted a statute that described the world as it was. So, when you go to undo something like that, quite often you are going to have to go in and look at the statute. I don't believe the parties are going to work it out among themselves.

Mr. SHAYS. You say you don't?

Ms. DWYER. I don't believe so, no.

Mr. SHAYS. Fair enough.

Ms. DWYER. It has been a long couple of years. The SEC didn't act on my petition in 1999, so I don't know what they are going to do with Bob's.

There is a simple solution, and that is to continue a level of regulated disclosure of the NBBO and then have a free market and any other data above and beyond that depth of other kinds of prices.

Mr. SHAYS. In fairness to disclosure, I happen to represent the 4th District. I am very proud that NASDAQ is there, so I don't want you guys to do anything to hurt NASDAQ, so we will have to——

Ms. DWYER. We are one of NASDAQ's best customers and one of the New York Stock Exchange's as well.

Mr. SHAYS. Mr. Knight, how do you think this is going to be worked out?

Mr. KNIGHT. We believe that the Seligman Committee is very constructive in the approach it has taken. They are listening to all parties. We believe it is quite possible they will reach a solution here. I think, of course, as we all know, there has not been a chair named to the SEC at this point. I think that is part of the issue here, too, is the SEC's response to that.

We would want to see what the new commission's views are in this area.

The way the law is structured, in our view, is sufficiently flexible to deal with the situation, and we think, frankly, Congress should be very proud.

If you look at Congressional history and the economic history of the United States, the securities laws have served us very well.

Mr. SHAYS. Right, they have, but I do think—I will say, even with my preliminary look, I do believe that there will be some change, and the question is, what will that be?

I would question, and let me give you the opportunity to answer it. Do you believe that there is discrimination in pricing? Do you think that takes place?

Mr. KNIGHT. No, in fact, we have a statutory obligation, which is policed by our board and by the SEC to avoid that.

That is one of the reasons why our pricing is out on the website.

That is one of the reasons we are heavily monitored in this area, so we don't believe we are——

Mr. SHAYS. So, are you different than the New York Stock Exchange?

Mr. KNIGHT. Both are subject to the same rules.

Mr. SHAYS. Could you use your mike, please? Use your mike.

Mr. BRITZ. We have the same view. We are subject to the same regulatory regime as the——

Mr. SHAYS. So, in the ten seconds I have left, someone on the other side tell me how it is discriminatory.

Mr. MACDONALD. Well, I would ask that both New York and NASDAQ, they have the power to do that—allow firms like online brokers—and I am including Merrill Lynch and all the others who are going online—to not have the discrimination of having a customer call a broker and the quote is free, but they go to the website, they get charged. That is discriminatory. That needs to change immediately. It is within their power. They should do it.

Mr. SHAYS. I'll follow up in the next round.

Chairman BAKER. Thank you, Mr. Shays.

Mr. Ford.

Mr. FORD. Thank you, Mr. Chairman. I will be very brief. I want to just, sort of, one more time for the record: there are three—according to the notes we have been provided, there are three of the witnesses—and I was not here at the beginning of the testimony, so I do apologize. But, three of the witnesses serve on this advisory committee. Which three members?

The three right there in the middle, so your advice to those of us on the committee, in a lot of ways, is to essentially ignore what that advisory committee would be doing, because it has reached the point where you—if I am mischaracterizing it—you have come today to suggest that we act in light of the fact—during the face of the fact that the advisory committee is meeting.

I guess we have—those of us on the committee don't know a whole lot about the market.

We read the *Wall Street Journal*, and we think we are really empowered and smart about what is going on.

We are led to believe that some progress is being made on this committee—with this advisory committee. If that is not the case, it would be helpful for those of us on the committee.

Two, in light of your participation with this committee, you are advising us to act even though the committee is in the process of trying to figure this out.

Is that a fair characterization?

Mr. BRITZ. Certainly not on behalf of the New York Stock Exchange, with the proviso I mentioned earlier that we would never presume to suggest what Congress ought and ought not to do.

There are about 25 people around that table at the Seligman Committee, a broad cross-section of customers, providers, users,

vendors, representatives of the public, and so on, who have been discussing this since October of last year.

As Carrie said, the end-product is due around the middle of September of this year.

I would not presume to give you advice as to wait or not wait, but it is inaccurate to reflect the New York Stock Exchange position that we are asking you to act before that committee.

Mr. KNIGHT. NASDAQ is a member of that——

Ms. DWYER. NASDAQ as well, yes. We were invited to come here today to help educate the subcommittee on the issues. So, at least, I did not come with any idea that we were recommending legislation.

I think I am being realistic in answering the question that was posed to me by the other Member.

Mr. FORD. Would you be opposed if we were to act prior to the advisory committee making a recommendation?

Ms. DWYER. No, I wouldn't oppose that at all, but I think that this subcommittee and the large committee need to get into this issue, understand it, and understand where the Seligman Committee is coming from. You may know very soon what the ultimate recommendations will be. I don't know that you would need to wait for a final report.

Mr. PUTNAM. And, as Carrie pointed out earlier, it may take legislative action at the end of—when the committee produces a report.

Certainly, this subcommittee educating itself is going to be helpful if we are going to get something done quickly if that legislative action is required.

Mr. FORD. Thank you. I know that this subcommittee, and certainly many on this subcommittee have—and I am new to the subcommittee, obviously a newly created one. I often believe that the marketplace can figure out a lot of these problems.

So, consistent with that, I hope that we don't pick and choose when we want the market to act and when we want to act.

I guess my last question sort of deals with who actually—and we have all of these questions they provided us, and some are good, and some are not so good.

One that sort of stands out is the sort of the ownership aspect of this data.

As one who is trying to be educated here today, in the eyes of those on the committee—those who have testified—who actually owns this data?

I mean, it reminds me a little bit of what a lot of the people in my district do with Napster.

Obviously, there are some steps being taken now to correct—to remedy that and to ensure that everyone gets their fair share of the pie.

In the eyes of those testifying today, who actually owns the data?

Would you say those who compile it own it, those who access it own it, those who own it need it, or those who know more about it own it?

I am just curious.

Mr. BRITZ. Congressman, again, as a non-lawyer, I am not qualified to answer that question. I would quote Professor Seligman.

Mr. FORD. I am a lawyer, and I know I am not qualified to answer the question.

So, any light you could shed would be helpful.

Mr. BRITZ. Professor Seligman thinks it is a great article for a law review and not much more than that. I don't know who owns it, to be perfectly honest with you.

I know that the New York Stock Exchange and other markets invest great sums of money to produce it. I know that the New York Stock Exchange has been charging for market data for 130 years.

I know that 34 Act as it exists today talks about terms that are fair and reasonable, and not unreasonable but discriminatory, and clearly, if not explicitly, implicitly refers to the cost as being part of those terms.

So, there is a great deal of history. One of the committee members at our last meeting said it is an irrelevant question. It doesn't matter who owns it. It is important to produce it.

There is a cost associated with producing it, and you ought to be able to recoup that cost.

Mr. BELL. Mr. Ford, if I could just speak up very quickly, basically our point of view is that these——

Chairman BAKER. Pull the mike up just a little closer.

Mr. BELL. All right. This market information, we believe, is really in the public's ownership.

We believe these are facts. We think we are bringing together a buyer and a seller. The result of that information is market data, and it should be available to the public.

Chairman BAKER. Mr. Ford, you've exceeded your time.

Mr. FORD. Thank you for letting me go over a little bit, Mr. Chairman.

Chairman BAKER. Yes, sir, Mr. Ford. To not inconvenience our panel unnecessarily, we have a vote with about—I understand two votes with about six minutes left on the first.

It would be my intent to recess for approximately 15 minutes.

We have at least three, maybe four, Members who would like to ask another question. I would point out to those Members, when I return, we will convene.

So, if you will timely return Mr. Crowley, Mr. Barr, Mr. Shays, I will recognize who is here first so we can move this meeting along a little better.

We stand in recess for at least 15 minutes.

[Recess.]

Chairman BAKER. If I could ask the hearing to come to order and our witnesses to take their seats, please.

We will have other Members returning momentarily. I would recognize Mr. Bentsen at this time.

Mr. BENTSEN. Thank you, Mr. Chairman. I have a couple of questions.

As I read through the testimony and try and grasp the issue, I want to pose a question to you, and tell me whether I am right or wrong.

If I am right, then I assume I will get a variety of answers.

But, it would appear that the issue here, at least in part, on the fee structure that Ameritrade and Schwab, and other primarily online or discount-brokerage firms, are concerned about is, as more

of your clients are directly trading themselves, they are incurring this cost on a per-capita basis, as opposed to someone going through a traditional brokerage operation where they would call up Merrill Lynch or whoever.

That cost is maybe passed on or not, but, also, because Merrill is able to absorb that cost through the 2000 terminals they have hooked up around the country and disseminate that to their brokerage operations, they carry that cost.

I guess my question is sort of two-part. I mean, one, doesn't a Merrill or a traditional brokerage operation—I mean, they incur that cost, and they are able to spread it out. But, they are also incurring a lot of overhead costs that the online brokerage is not incurring. So, doesn't it all come out in the wash in that respect?

Second, isn't that just part of the disintermediation that is occurring where, I mean, there are some costs associated with it, that nobody is getting anything for free here. It is just a business plan between what the online brokerage has and what the traditional brokerage has. In fact, as we see more of the traditional brokerage houses go to an online subsidiary or component, they are sort of affected by both.

So, is that a correct analysis of what is going on?

If it is, I am not sure that I understand where the equity is in your argument.

The second part, I think I do have a different feeling, and that is that, with the disintermediation that is going on, the question that these changes do have certain exemptions under the law based on the 75 amendments to the Act then does raise some questions and how they raise their fees, and how they allocate.

So, I understand that equity argument, but the first part I am not sure I see where your equity is.

Ms. DWYER. Well—so, let me say first of all that a statement was made earlier that it is primarily the online firms that are carrying this issue.

We have been the noisiest for sure, because the effect has been so immediate and sharp for us.

But, Merrill Lynch, Morgan Stanley, Smith Barney are all represented on the Seligman Committee.

There has been consensus with those firms as well that a real hard look needs to take place at the governance and at the level of costs that they absorb, too.

So, it is not simply an online issue. It will be more of an issue for them as they transfer more of their business to online.

I don't think—you know, if you understood Schwab's business, we have 350 branches. We have the same kind of overhead that a firm like Merrill Lynch would have.

We have, to support our internet business, a tremendous investment in infrastructure.

I think we have the largest mainframe computer system in the world, possibly, certainly the largest transactional one.

So, there is a tremendous—I don't think there is a huge difference in the cost of doing the brokerage business even though our customers may choose to access us sometimes over the internet.

The issue about the cost of quotation information, the market data, is that it is differentially priced depending on how the customer chooses to access the data.

If a customer chooses to call his broker at Merrill——

Mr. BENTSEN. Let me interrupt you for a second. I understand that.

But, the point is that, through a discount brokerage operation where you offer a much more discounted price than the traditional brokerage operation, there are some underlying costs that have to be assumed somewhere.

Doesn't the client ultimately have to assume those costs if they are going to go directly as opposed to going through——

Ms. DWYER. The difference is that the costs are being set by the exchange. The exchange has no incremental costs or even interest in how the quote is supplied. It doesn't affect the exchange in any way, shape, or form. There is no reason why a customer who calls Merrill to get a quote is charged nothing.

The firm absorbs a per-terminal cost. Our firm absorbs 10,000 terminal costs.

If a customer chooses to access us over the internet, he or she pays on a usage basis.

There is no reason why the exchange, as the setter of those costs and the entity that gets the revenues—why there should be any difference there.

That is the issue. It's not the firm's business model so much as the fact that the exchange has no incremental cost once it provides the quote.

The quote is distributed over our network or over Merrill's.

We have the cost of creating that network and supplying it to the customer, but the pricing of the data itself is different.

Does that answer your question?

Mr. BENTSEN. I guess I still don't—I would like to hear from the exchanges, but I still don't understand.

Is the price for access to the data different between you as an individual and—when you get it off of your home computer terminal and the price that Schwab pays when it gets it off its terminal in Schwab San Francisco, or wherever?

Ms. DWYER. Well, we may not charge the customer at all.

Mr. BENTSEN. But I mean the price between the computer that——

Ms. DWYER. Yes. Yes, it is a different.

Mr. BENTSEN. There is a different price?

Ms. DWYER. It is a different fee schedule based on the usage.

One of the issues that many of us have had is there are different usage models and different fees associated with how you use the data.

We think that should be blind to the exchange, because it doesn't raise the exchange's cost to provide us with a data port or a per quote, or whether we provide per-quote stream to our customers or to provide to a broker's terminal.

There should be no difference in that pricing, and yet the exchanges have over the years developed pricing models depending on our usage.

So, that is really the issue rather than what the customer pays or doesn't pay, is that clear?

Mr. BENTSEN. Sort of.

Mr. BAKER. Yes, Mr. Britz, could you respond?

Mr. BRITZ. I think your analysis is incredibly perceptive. You synthesized the discussion better than I could have myself.

The notion that there is discrimination as between online and so-called full-line traditional broker-dealer is actually quite silly.

For example, Merrill Lynch, when I call them up and ask them for a quotation, is paying for the display device that enables them to give me that quotation in the first place.

Just to put this in some context, that display device revenue is the overwhelming portion of the New York Stock Exchange's revenue and market data north of 85 percent.

Merrill Lynch non-online firm, in general, is the single largest payer for market data.

So, I think you need to understand that context and the notion that prices are escalating in a linear way belies the fact that there is an enterprise industry-wide cap, at least within the CTA organization, of one-half-a-million dollars a month.

Mr. BELL. Mr. Congressman, if I could just give you my perspective as a vendor.

One of the things we brought up earlier was the fact that the individual investor can go to a website that is being offered by——

Mr. SHAYS. Excuse me, sir. I have a real hard time hearing, and I know you have something important to say. You talk away from the mike. I need you to talk into it.

Mr. BELL. I'm sorry. I was just trying to give you my perspective as far as a vendor's concern.

We are trying to innovate in this market by providing all kinds of monitor screens and real-time information to our users.

What concerns us is that we now have competition from the exchanges who are also putting this real-time information on their websites.

The difference is that we have to choose as a vendor to either absorb the cost of us putting those real-time prices up on those—our analytics or passing them on to our clients, which eventually then gets passed on, we believe, to the individual investors.

So, now, we are in a competition situation where the exchanges are displaying the same information that they get for free essentially versus what we are paying for.

Mr. BENTSEN. I would just say, Mr. Chairman, you all are an intermediary of information.

I am familiar with—or used to be familiar with your product. It has probably changed a thousand times since then.

But, that seems to me a somewhat different issue, but a real issue, and it is something that the subcommittee ought to take a look at.

Thank you, Mr. Chairman.

Mr. MACDONALD. Mr. Bentsen, this is Randy MacDonald. In my mind, it is very simple.

Merrill Lynch has 14,000 salesmen out there, and they are moving to online. They are going to have the same exact problem that we have, but let me demonstrate my point by extreme.

Ninety-eight percent of all of our trades happen in an automated fashion.

That is not the case for Merrill Lynch. We both have overhead, so the issue for me is we are impeding progress here. Innovation is being impeded to the disadvantage of the individual investor.

The fact that I can call Merrill Lynch rep and get the quote for free, whereas if I go onto an Ameritrade website I have to pay, is discriminatory.

It is arbitrary and capricious on the part of the SROs, and it needs to change.

They have the power to change it right now, and they refuse.

Chairman BAKER. Thank you, Mr. MacDonald.

Mr. Shays.

Mr. SHAYS. I really appreciate my colleague from Texas asking the question he did, because that is where I ended up with the discriminatory.

The only example I heard was the issue of calling up a broker and not having to pay a fee.

I did think it is slightly different, because my sense is that, when I deal with a broker, I am paying for other costs.

I would say to you, Mr. MacDonald, that I don't watch TV, because I don't like advertisements. But, if I knew when your advertisements were on, I would watch TV just for the advertisements. I love them.

Mr. MACDONALD. Thank you.

Mr. SHAYS. And I would think—but, what I get a sense of is that, if I deal through you, my costs are less; if I deal through a broker, my costs are higher.

So, I don't want to call, and my sense is that I will get the information the way I want when I want instead of having to go through someone who tells me something.

So, I guess—tell me another discriminatory pricing.

Mr. MACDONALD. Well, the other one I mentioned was the actual subscription agreement.

If you and Mr. Shays want to get unlimited real-time quotes, I have to have you sign a subscription agreement. We have attempted to do that through the web through a click-through method that has been—the process of which is now being rejected again.

We also are being rejected, because we have the ability for people in multiple locations to sign on to their account, so that my wife can be on our account looking up news, weather, sports, her net worth, account, and so forth.

I can be on the account at the same time trading, and the exchange has told us that that cannot happen.

I say, well, the telephone is the exact same thing. If my wife calls up a broker at Merrill Lynch and I am also on the phone from Merrill Lynch, it is free, and you're telling me that—again, it is discriminatory in my mind. Just because the device is the internet versus the telephone, there are different rules.

I am not getting it. Now, on the issue of unbundled execution, I think you are 100-percent correct.

The cost structure is very different, because we represent an unbundled execution.

We have given our customers the choice of just an execution.

You don't have to pay for research. We are not in the advice game, so that is the big difference in pricing.

That is what we have always represented is choice for the consumer.

We are having a very difficult time right now dealing with these SROs.

Mr. SHAYS. What I am trying to wrestle with is my general concept of a monopoly somehow is regulated.

What is the protection to the public that the fees that you charge will be fair, reasonable, and nondiscriminatory and consistent with your obligations under the exchange?

What protects me as a——

Mr. MACDONALD. Well, one thing I have to do——

Mr. SHAYS. I'm not asking you. I'm sorry, I meant the exchanges.

Mr. MACDONALD. I'm sorry.

Mr. BRITZ. Congressman, the process that I described before is one that begins with either an idea at the SRO level or the customer bringing an idea to us.

It is then vetted with a wide variety of customers, either individually or through trade associations, again, up to our board to the extent it continues to have some traction, finally to the SEC for public comment, and the ultimate disposition one way or the other with the SEC.

Keep in mind, even at our board level, it is 50 percent chief executive officers of member firms—the payers.

Mr. SHAYS. Does the public get to see all your data on costs?

Mr. BRITZ. Sure they do. That data is filed with the Securities and Exchange Commission and available for public viewing.

Mr. KNIGHT. We have the same process, and we are subject to the same discovery, if you will, by the SEC.

The process is a public process where public comment can be involved and where the board structure——

It is important to understand that these entities—exchanges—have a board structure unlike any other in the American corporate world.

We are required by statute to have a certain composition that reflects a non-industry interest in our market that reflects the public interest.

Those boards must approve this knowing very well their legal obligations here to the public to protect them. Then, and only then, will it go to the SEC, where they go through a similar process of asking these questions and allowing the public to comment again.

Ms. DWYER. I always hate to be in a position of contradicting my regulators.

But, let me just give you an example of how this process doesn't always work.

Mr. SHAYS. And who are you referring to as your regulators?

Ms. DWYER. My primary regulators are the NASDAQ and the New York Stock Exchange.

A couple of years ago, our customer usage fee was doubled in a filing that was effective on filing, perfectly legal, but does not provide any opportunity for notice of public comment.

Mr. SHAYS. The notice of filing takes effect——

Ms. DWYER. The filing takes effect on filing, and your only right is to get the SEC to abrogate it if you feel that it wasn't properly effected.

Mr. SHAYS. And does it go back to the fees that were already paid, or does it just start?

Ms. DWYER. Well, if it is abrogated. So, I will finish the example.

The fees were doubled, no notice. In fact, we were very surprised. We were in the middle of a negotiation with the exchange at the time, and we saw it in the *Federal Register* after it had been filed.

We asked the SEC to abrogate it, because we felt that the multiple was huge—the effect on us was huge, there should be public comment.

The exchange withdrew it and instituted the fee for awhile as a pilot program.

SEC did not abrogate it. There was no public notice and comment, and the fee stayed.

Now, subsequent negotiations got those fees down, and they were properly filed.

We have gone on with a lower rate structure, but there are other pilots out there that don't go through the process——

Mr. SHAYS. Mr. Chairman, could I just have someone explain to me why it is—do you mind if I——

Chairman BAKER. No, please.

Mr. SHAYS. Explain to a new Member here, when you say a pilot project, I don't understand why it is a pilot project. You said it ultimately became a pilot project.

Ms. DWYER. Pilots—this is something we touched on in our testimony.

Under the CTA plan, the exchanges are allowed to conduct pilot programs to test pricing models. They do not go through the rule—they are not considered rules or changes to the plans.

Mr. SHAYS. No, I understand. What I don't understand is, if it is a pilot project, it only affects certain of its customers or anyone?

Ms. DWYER. Well, yes. For instance, Schwab had a pilot program for 7 years with a pricing structure with one of the markets. Schwab was, to my knowledge, the only participant in that program

Mr. SHAYS. Maybe in the next round. I would just like to understand what protects each of the so-called—I call you a customer—each of the customers from knowing that they have the best price that their competition has and that there are not special arrangements for particular groups.

Chairman BAKER. Thank you, Mr. Shays. I'll follow up on that, too, to some extent.

Ms. Dwyer, would it be your opinion that the result of the pilots is to artificially distort the pricing mechanisms at least momentarily or for some duration while the pilot is operative?

Ms. DWYER. Well, I think that is so. If the pilot cannot be taken advantage of by all, if it is not well-known, absolutely. Then, as I said in my testimony, we were beneficiaries of one. We enjoyed it very much.

But, you know, it leads you to wonder what else is out there and leads you to think there should be more transparency in the system.

Chairman BAKER. Let me take a slightly different tack from my earlier line of questioning, particularly for Ms. Dwyer and Mr. Putnam.

The exchanges have developed extensive infrastructure and spent a lot of money to facilitate transactional activity. The benefit or sideline of that is the data which comes from those transactions, which obviously has some value.

But, without the data, there wouldn't be transactions for anybody, because I am not going to go out and buy X shares of whatever depending on what the price is.

On the one hand, we have an unusual problem the SEC has created, and the Congress by law, a requirement to have a consolidated source for information to facilitate economic transactions which should be neutral and blind to all participants operated at a fair market cost to incentivize these transactions.

It would appear, coming at this issue from a different direction, that it is much like having a public utility who is told you have to deliver the electrical service, do it in non-profitable areas as well as profitable areas, to make sure all people have access, do it in a fair, reasonable, and nondiscriminatory standard. And now somebody wants to come in and take certain parts of that utility's operation that are profitable and share in the revenue stream.

Am I missing it, or what is the distinction there between what you are asking for and what the exchanges have historically done and provided?

Mr. PUTNAM. I think that your example of public utilities is exactly the problem.

The way the system works there isn't competition among market centers and providers of data, so that we can get at a fair price——

Chairman BAKER. But, when you deregulate public utilities, all too often in some States I have heard about, the consequences may not be necessarily beneficial, because you don't have an infrastructure that is properly funded that can provide market integrity with the delivery of the product.

I have wrestled with this privately before our hearing. How do we fix this?

You can't blow up the public utility. We need them. Whether you like them or not, you've got to have them if you want to have a market.

I have heard you say—I heard Ms. Dwyer say a specific recommendation for action.

I have heard you say it ought to be incremental, but give me an increment or two.

Mr. PUTNAM. Well, it gets back to our view, which is different than the over-the-counter marketplace or the New York Stock Exchange's view, at least my perception of what their view is.

We believe that the market data belongs to the customer, actually, the one who started by placing an order in the system.

Therefore, we don't charge for that data. What we do charge for is the facility that we operate where we execute orders when customers want to interact with those bids and offers.

So, we charge execution fees. There is, obviously, a cost for us to produce that market data.

We just absorb it through transaction fees when customers come to buy and sell.

Chairman BAKER. I can understand that. Instead of saying here is your charge for market data, here is your charge for transaction fees, you take market data off the shelf and say here is your enhanced charge for transaction fees which covers the cost of the market data.

Everybody does that. You've got to make money in the business, or else you are not going to do it.

I don't have a problem with profit. That is not what is bothering me.

The only thing that is a problem for me is if there is, in your view, a monopoly which now governs the issuance of this market data, which then leads to transactions off which everyone prospers.

Is there a mechanism you can suggest to provide alternate competition that is not disruptive to the current system, thereby putting it all in jeopardy?

In other words, we don't want to shoot the guys. We want to provide another racehorse in the race to see if they can do it better or more efficiently, and thereby reduce cost as a result of competition.

I think that is what I have heard you say.

Mr. PUTNAM. We've suggested that we maintain the Government utility consolidator, at the same time allowing for competitors to come in the system.

The reason for maintaining the current utility is just to guarantee that the baseline of information, a bid and offer, and a last-sale is available.

Chairman BAKER. I agree with you on that. We're there. Next step? How do we get to that competition you are talking about?

Mr. PUTNAM. The next step is—one suggestion has been to create a category of consolidators. So, you go to the SEC and you say, "I want to be a consolidator of information. Here is the system that I am going to operate. I have adequate capacity and reliability, and I am signing up as a consolidator," just like we do as an ECN today.

We sign up as an alternative marketplace, and we have to meet certain standards.

Then, we go in the business of providing that data. I think New York would like to be one of those.

We think that they should have the right to be one of those.

At that point, market forces will start to decide on what price the data is.

Chairman BAKER. May I ask Mr. Britz on that point? Does he want to be one?

Mr. BRITZ. No, Congressman. I think we are unlikely to be a consolidator.

But, we are not against the notion of competing consolidators at all.

Mr. PUTNAM. And I guess they would like to provide their own information at that point.

We also think that there is some value—not some value—a big value in allowing market-data providers who want to be non-consolidators.

That example would be Yahoo, where they are giving away certain data for free, but they don't have to provide consolidated data.

With adequate disclosure, maybe the customer that Randy was talking about that trades once every 1½ months decides that that is good enough for them, and they don't want to go the extra cost of getting the superior data and that that is adequate for them to look at.

We think that having the second category is another way of introducing some competition in the process.

Chairman BAKER. Not to go on at length, let me just request from any participant if there is a suggestion for specific statutory modifications that you think facilitate additional transparency, or the consolidator approach which Mr. Britz has said there to which there is little objection if properly done.

Let's explore that avenue. It would appear to me that what every member is about is making sure any participant in the marketplace has access to real-time information at the lowest cost possible. That benefits everybody, because that means you are more likely to have transactions that occur, and everybody goes away happy.

At the moment, it appears there may be some inhibitions to all parties having access to real-time information at what they perceive to be an unfair cost basis.

Now, I don't know that is the case, because I don't know what the cost is, which gets me back to my eventual starting point.

Mr. Bentsen, did you want another round?

Mr. BENTSEN. Well, Mr. Chairman, if I could just for a second.

Yes, I want to echo what you said, because, Mr. MacDonald, you made the comment that your clients are paying for it and other clients aren't paying for it.

Ms. Dwyer has said there is a different fee structure, and I guess, you know, that is something we are going to have to learn—I'm going to have to look into, because I don't know all the details.

But, somebody is paying for it. Whether it is being passed on directly to online purchasers versus full-line purchasers, somebody is paying for it somewhere, because the information is not free.

I do agree that we are sort of entering this new world of technological innovation we've got.

We have this tremendous market disintermediation in all sectors of the economy just about, not just here in the power sector and elsewhere.

But, I am not yet convinced, and maybe I will be, that there is still a service that exchanges that provide, to the extent that Mr. Putnam and his colleagues are creating sort of sub-exchanges, I guess, if I understand your business.

There still is a question, or a desire, I think, for market integrity that does, at least in theory, and I think generally comes along with exchanges, and also the liquidity that is provided in market-makers, and all of that.

There is a price associated with that, so I guess what we have to get to is exactly how that floats out at the end of the day.

I mean, again, you all are able to offer trades at $8 a bundle versus $80 a bundle, or whatever the going rate is, and so the other costs have to be made up.

But, I think actually this is a pretty fascinating issue, I have to tell you, the more I listen to it.

Let me ask, Mr. Bell, you talked about in your testimony the MSRB's proposal for the muni bond repository of information and the fact that this is a regulatory imposition upon the market to provide this. Wasn't that as a result of concerns—as we know, municipal bonds are not under the Securities and Exchange Act—are not subject to SEC registration, nor should they be, in my opinion.

But, there was a concern that, even with the broad institutional and retail market—secondary market for municipal securities, that there wasn't sufficient price transparency.

So, as sort of a compromise, this idea of putting together this information repository would provide greater price transparency.

Is that a fair tradeoff, or, in your testimony, you're saying that is a concern that now the Government is imposing it here and saying provide this information free of charge to everybody?

Mr. BELL. Well, I think it is a good question. I think that the municipal markets are a very different market from, let's say, the equity markets in the sense that——

For example, for one municipal bond, Bloomberg, collects 40 different pieces of data. You need all those 40 pieces of data, we believe, in order to accurately determine whether the price is right or not—whether it is a fair price.

As a NRM-Serv—and I think there's five different NRM-Servs—we take a proactive approach toward getting all this information.

Other NRM-Servs seem to take a more reactive approach. As a NRM-Serv, all the issuers in the banks are required to provide documentation to the NRM-Servs at some reasonable timeframe.

So, you can sit back and get that piece of paper that says three weeks ago there was a refunding on this bond. As a result of this funding, it has now gone from, let's say, Double A to Triple A in its rating. Obviously, if the rating changes, goes up, it usually becomes more valuable.

So, what we tend to do is we say, "Look, we know that this is something that's happening. We're going to call up the issuer ourselves."

We bear the costs ourselves, and we bear the cost of the people. We have about 15, 16 people that do this on a daily basis.

We get that information before the piece of paper comes out, and we put that out on the system.

So, even though eventually the data will all be the same and eventually you will be able to determine if that price is fair once that official notice comes out, if you take more of a proactive approach, you have added value to that information on that bond. As such, if you have that information, you can then determine quickly whether that price is fair or not.

So, it tends to be, I think—you know, the approach the NRM-Servs take are different. As a result, if we were to have to pool all that information and make it available on a common basis, then the value-added would obviously—you know, we would be giving our value-added away.

Mr. BENTSEN. So your concern as an information provider is that you would have to give away some of your property or some of your intellectual property that is associated with that, not the—I am not

familiar with the acronym yet—but not the repository—the idea of the repository itself or the fact that the market-makers have to provide the information voluntarily.

Your concern is that other providers of information such as Bloombergs or others might later have to provide that and that would undercut your own business?

Mr. BELL. Well, I mean, in a simple example, if we are taking a proactive approach, then the person—the NRM-Serv who is taking a reactive approach could just sit back and wait for us to tell them, "Hey, this is refunded."

So, they don't have to spend the money of having those people call up and find out if it has happened three weeks before it actually becomes official by a piece of paper.

So, we are actually then giving our value to our competitors, if you will.

Chairman BAKER. Can I jump to Mr. Shays? Mr. Shays.

Mr. SHAYS. I find this absolutely fascinating. You referred to, the SRO says, your competitors. But, they are also your service providers and, in some cases, they are your competitor. But, isn't it true, also, that some of you sit on their board?

Ms. DWYER. Yes.

Mr. SHAYS. I mean, it is really not all that kind of, you know, precise and clean.

Ms. DWYER. Highly incestuous.

Mr. SHAYS. It is. No, I think—I am saying that is the way it has to work. But, in a way—are you in a sense making an argument to us that you are like the post office, you have to provide universal service and that your potential people you provide services compete with you and will take—will cream—you know, go after what is most profitable?

Mr. BRITZ. No, Congressman, I was making no such argument.

You are absolutely right. Our board room is an interesting place.

Sitting around that board table are our owners, our customers, and our competitors.

Mr. SHAYS. In that sense, it is like the post office, because FedEx and UPS are helping to make decisions on why the post office prices itself.

Mr. BRITZ. But, because of the regime that we have today—and this I think is what Jerry was referring to—markets compete today—not only markets—markets compete with broker-dealers.

We are a competitor of Schwab and others on a certain level.

Markets compete in lots of arenas, certainly for execution, but because of the regulatory regime we have today vis a vis the Consolidated Tape Association, they don't compete in terms of distributing market information.

Mr. SHAYS. But what I hear on the other side is they are basically fearing that you are using the fees to subsidize other parts of your business that compete with them.

You know, that is a valid concern if it is true.

Mr. BRITZ. I think if you ask them they will not make that suggestion about the New York Stock Exchange.

I think there may be examples of other markets that may be doing that. They can't make that suggestion vis a vis the New York Stock Exchange.

Mr. SHAYS. Mr. Knight, so basically they are making it against you?

Mr. KNIGHT. I can't imagine that they are complaining about a dollar a customer fee or the fact that we are providing information for free, although, when we applied to the SEC to provide information for free on our website.

Mr. SHAYS. That's a dollar a month?

Mr. KNIGHT. Right.

Mr. SHAYS. That's not a dollar a transaction?

Mr. KNIGHT. No, in fact it is an unlimited amount of transactions for an individual.

And many of these were delivered by pilot programs, but I think the important point here is that we feel there could be more competition put into the system.

We and the New York Stock Exchange and Archipelago are all suggesting different ways to do that.

But, they share the common characteristic of eliminating the current single processor and have multiple consolidators.

We are willing to live with that system, and we think it would bring even more competition.

But, right now, the oversight by the SEC, the oversight by our boards, and the nature of the current process does give the public a large measure of protection.

Is it perfect? No. Can it be improved? Yes. Are we on a road to improvement? I believe we are. We will know more in a few months.

Mr. BRITZ. Congressman, if I may, there are some regional stock exchanges who pay for order flow, make a payment to a broker-dealer.

Some broker-dealers who are sitting at this table receive such payments, and they are on record as having said that they are using excess market-data fees to fund at least a portion of those payments.

I would go back to a statement I made earlier, some markets—the percentage of market-data revenues to total revenues is enormous relative to the New York Stock Exchange.

So, perhaps that is the reference.

Ms. DWYER. Can I just add a couple of things, or are we out of time?

Chairman BAKER. Certainly.

Ms. DWYER. I wanted to say that the NASDAQ fees, for example, there is a dollar a month rate that you can get if you want to subscribe, if you are going to use a lot of quotes.

There is also per-quote fee of one-half a cent, but that is on pilot.

It is going to revert back without change to a penny on May 31st.

This additional——

Mr. SHAYS. So then it will only be service?

Ms. DWYER. Pardon?

Mr. SHAYS. It will revert back to service?

Ms. DWYER. Unless somebody extends the pilot, it will revert back to a higher rate. There's also, if you want——

Mr. SHAYS. I just need to understand, a higher per-transaction rate?

Ms. DWYER. Per quote. Yes, per quote. There is also, if you want Level 2 data, which is the good data on the NASDAQ market—it gives you more depth of market—you need that in a decimalized world—that is $10 a month per customer. That is also on a pilot that is scheduled to revert back to $50 a month if it is not changed.

So, yes, the fees have come down quite a lot, but, you know, this is why we concentrate on the structure of the setting of the fees, because it is an unstable situation.

Mr. SHAYS. Well, you be nice to my NASDAQ.

Chairman BAKER. If I may suggest, just as a summation for the subcommittee's purpose, we would very much appreciate specific recommendations with regard to statutory modifications anyone might think appropriate.

There appears to be some agreement, surprisingly, on the multiple-consolidator approach. I am sure there are variations on how that is achieved. We would like to understand that more fully.

I think you can tell from the number of Members who participated and the duration of this hearing, which many would not have expected to last quite this long, that there is considerable interest, because we believe that the markets are dynamic, they are growing, and that there are significant new numbers of investors who are now investing the $200 a month, perhaps, toward the first home, the college education, or that retirement one day.

They are people who are brand new to this market, and, since 1995, the boom in online investors is nothing short of staggering.

There is great sensitivity, therefore, by the Members of Congress to ensure that the system works efficiently and fairly.

We need to better understand how this process is working, because the basis on which these investment decisions are made is information.

We recognize the value and timeliness of that information.

We certainly want to recognize that the exchanges have done an extraordinary job with huge investment in providing this service.

But, we are bumping up against a changed economy that does make relevant review of these proposals, I think, very timely.

To that end, Members may have additional questions they may wish to submit for the record. We will leave the hearing record open for an additional 30 days. Certainly, we appreciate any additional comments you would like to make, as well, for the record.

I appreciate your patience, your participation, and our hearing is adjourned. Thank you.

[Whereupon, at 12:56 p.m., the hearing was adjourned.]

A P P E N D I X

March 14, 2001

Congressman Joseph Crowley
Committee on Financial Services, Subcommittee on Capitol Markets
Opening Statement
Hearing - Market Data
March 14, 2001

I want to begin by thanking Chairman Baker and Ranking Member Kanjorski for holding this important hearing today

Market Data is fundamental to the securities markets. The transparency of this market information, in the form of public availability of real time trade and quotation data, is essential for there to be efficient price discovery and the best execution of customer orders for American investors both small and large

As has been noted before, with 50% of all Americans now owning some type of stock, most notably in 401(k) plans, mutual funds or other savings and investment vehicles, it is key to both protect the integrity of our securities markets while also providing investors with a credible market and a free flow of honest and accurate information

Market data is key to this goal

Currently, when discussing market data, our securities industry through the various Exchanges is doing a good job in providing this information to the investing public

Our nation's Exchanges are non-profit businesses that are in the business of producing and distributing data

Currently, the exchanges "own" this data, which they provide at a very reasonable price to such outlets as television networks, like MSNBC, and broker-dealers, like Merrill Lynch and Charles Schwab.

This data is vital to the operations of the broker dealers and these 24-hour business news channels

In fact, broker-dealers receive this information at a capped rate of $525,000 a month - a pittance of the profits organizations like Charles Schwab make from using this market data

No organization is being gouged for this data by the Exchanges as would be economically expected under the definition of a monopoly. This is because of the fervent regulations of the Exchanges and these fee rates by the Securities and Exchange Commission (SEC)

In fact, the current system for providing market data is a boon for individual investors. For example, the New York Stock Exchange does not charge small

investors for this data. And coming this spring, the NYSE will be offering a new program known as "Market Track" on its website, putting the home viewer right on the trading floor

This will provide any investor real time stock prices and information for free.

The current system is good for small investors, like my working and middle class constituents in Queens and the Bronx, New York

But, if the rates for market data were changed to a utility style rate making process, as some have suggested, America would see a greater shift of costs for data passed onto individual investors in the form of increases in other trading fees - fees passed directly onto investors

The current system provides reasonable priced data to broker-dealers and other outsiders who decide to pay for this service. It should be noted that 50% of the buyers of market data are not in the securities industry, meaning there is no cost shift to the investing public of these Exchange-imposed, SEC regulated market data fees

Any change in the formulation of rates for market data will lead to increased costs to the investing public - mostly small time investors saving for a child's education or retirement plans.

Just as we met last week to discuss the harmful nature of excessive SEC fees to small investors, American investors will see even greater financial damage done to them if Congress allows or mandates a change in the market data pricing formula to another system, such as a utility style rate making process.

Therefore, this Committee should continue the status quo and wait at least until the Blue Ribbon SEC Commission reports its findings on Market Data in the fall before we attempt to take any action

Again, I thank the Chairman and Ranking member for holding this important hearing today. This provides us the opportunity to educate ourselves and our colleagues on issues important to American investors

Congress of the United States
Washington, DC 20515

April 12, 2001

To Whom It May Concern:

I would like to have the following question inserted into the record from the March 14 hearing in the Capital Markets Subcommittee hearing on Market Data:

Some critics contend that the NYSE's plan to provide real-time market data on its web site violates the CTA Operating Plan. Additionally, they contend that the NYSE must file its plans for MarkeTrac with the SEC and have this new product be subject to public comment and SEC approval. Can you please provide more details about NYSE MarkeTrac? Is it unreasonably discriminatory for the NYSE to charge broker-dealers for the same information that it plans to provide for no charge over its web site?

Sincerely,

Vito J. Fossella
Member of Congress

OPENING STATEMENT OF
RANKING MEMBER PAUL E. KANJORSKI
SUBCOMMITTEE ON CAPITAL MARKETS, INSURANCE,
AND GOVERNMENT SPONSORED ENTERPRISES

HEARING ON MARKET DATA
WEDNESDAY, MARCH 14, 2001

Mr. Chairman, thank you for the opportunity to comment on market information issues before we hear from our witnesses today. The securities industry presently faces few issues as important or as complex as those surrounding the ownership and distribution of market data.

In short, the wide distribution of market information remains a fundamental component of our nation's securities markets. A regulatory framework that promotes the transparency of market data -- especially the real-time, public dissemination of trade and quote information -- helps to make certain that all market participants have access to prices across our national market system. This access, in turn, helps to provide for efficient price discovery and the best execution of customer orders.

Congress first addressed the issue of market information when it enacted the Securities Acts Amendments of 1975. This statute, among other things, charged the Securities and Exchange Commission with establishing a consolidated, real-time stream of market information for securities in order to make transaction and quotation information widely available. As a result of this law, millions of investors worldwide now have easy access to market data.

But the world has changed substantially since Congress enacted the legislation governing market information, and we may therefore now need to refine our approach on such matters. For example, we passed the law and the Securities and Exchange Commission developed the regulations governing market data before the advent of technological and communications advances like the Internet, electronic communications networks, and alternative trading systems. This new technology has greatly expanded the opportunities for retail investors and interested individuals to obtain access to real-time market information.

Additionally, critics of the current system for distributing consolidated market data have raised a number of questions about the present system in recent years. For example, some contend that although market data fees for retail investors have fallen by 50 to 80 percent since 1998, they remain unusually high because no competition exists in the field of market data collection and distribution. To address this problem, some argue that we should allow competing entities to provide consolidated information and/or permit the exchanges to provide their own data outside the consolidator. By providing investors with more complete market information, we would promote the goal of greater transparency and thereby improve competition.

Although the Securities and Exchange Commission has recently begun to examine these difficult issues and other related and complicated questions through its concept release and advisory committee on market information, it is appropriate for us to begin to educate the Members of our Subcommittee about these complex subjects. Accordingly, we will hear today from a variety of witnesses about their views on market data. I want each of the witnesses to know that I approach the issue of market information with an open mind.

For me, one can distill the complex debates surrounding market data into three key questions. First, who owns market information? Second, how much should we charge for market data? And third, how should we distribute market information? The answers of our panelists to these questions will help me to discern how we can maintain the efficiency, effectiveness, and competitiveness of our nation's capital markets into the future and what further legislative action, if any, we should take to address the issue of market data.

In closing, Mr. Chairman, today's hearing is just the beginning of a discussion in the 107th Congress about market information. I anticipate that we will hold additional hearings on this issue in the upcoming months, especially after the Securities and Exchange Commission's advisory committee on market data publishes its report in September. I therefore look forward to working closely with you and with others as we address these multifaceted, complicated, and important matters.

Opening Statement of Congressman Bob Ney at the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises on "Market Information: Access and transparency"

I would first like to thank Chairman Baker and Ranking Member Kanjorski for taking the time to hold this important hearing. I would also like to thank our many distinguished guests for finding the time in their busy schedules to come before our subcommittee and testify on this important matter.

Mr. Chairman, market data is a vital part of the economic underpinning of our economy. While many people may not realize it, this information is the basis upon which our capital markets are established. In reality, the main purpose of markets is to produce data whose price provides a measure of a company's performance. The total sum of these prices provide a measure of how our economy as a whole is performing.

The very essence of a capital market is buyers and sellers meeting to bid and offer on securities. It is vital that these market makers have the information they need to make informed decisions about the best bids and offers possible for themselves and the investors they represent. Without having reliable market information, investors will not be able to make well-informed choices.

In the United States we are fortunate to have a system that has provided investors with reliable market information for many years. Part of the amazing growth our markets saw during the past decade was due to the fact that all investors are able to receive market data, and these investors trust that the data represents the best bids and offers available on the market. Now, every day people have access to markets that was never before possible. People trade stocks from home or their desktops at

work. People can even receive market data to, and trade stocks from, their cell phones and pagers. The markets have truly been opened to all Americans, big and small investors alike. Part of the creation of these opportunities comes from the fact that all people have access to information about the markets that they can trust, which is a result of a market system designed to promote integrity and reliability in our securities industry.

Though reliable, this system is quickly becoming outdated. The market system established by the 1975 National Market Amendments was designed for an era that did not have the Internet or high-speed telecommunications. Though this market system did result in the volume of securities being traded increasing exponentially, and saw the prices charged for market data decrease dramatically, there is still the opportunity to seize on the communications advancements of the last decade to provide greater access to and competition for market information. The technologies that have forever changed our society may have eliminated the need for the national market system.

We find ourselves looking at a historic opportunity to restructure our markets so as to promote even greater access to market data. We have the opportunity to remove inefficiencies in the consolidation and distribution of market data, which will decrease the cost of reliable, real time, information to consumers.

Mr. Chairman, I would like to thank you again for holding this hearing, which will provide the members of this subcommittee an opportunity to begin a process of learning and exploring this complex issue that is so vitally important to the future of our markets, and economy.

Opening Statement
House Financial Services Committee Chairman Michael G. Oxley
March 14, 2001
Subcomittee on Capital Markets, Insurance and Government Sponsored Enterprises Hearing
"Public Access to Stock Market Data: Improving Transparency and Competition"

I thank the Chair and commend him for holding this hearing on an issue that is fundamental to the health of our capital markets. This morning we will examine how stock market data is provided to the public, how it is paid for, what information is available to the public about market data fees, and how competition might improve the way investors get market data.

While the regulatory structure we will examine is complicated, our goal is simple: to ensure that investors are getting the best possible information about stock prices in the most efficient way.

As one observer put it last year following a hearing I held on this subject, stock market data – that is, the quotes at which people are willing to buy and sell stock, and the information showing the price of the last sale of a stock – is oxygen to investors. Indeed, the transparency of our marketplace is the backbone of its success.

Unfortunately, the regulatory structure that exists today was put in place back in the 1970's, when the only person using a cell phone was George Jetson, and Al Gore hadn't even thought about the Internet yet.

That outdated regulatory structure – which may have made sense before the advent of modern communications technology – put into place a system that prevents competition in the provision of consolidated market data, and impedes innovation in the way market data is presented to investors.

The cost of market data is significant – and those costs are passed on to investors, just like the transaction fees this Subcommittee heard about last week. Competition is always a better way to set prices than regulation – but with no competition in the provision of consolidated market data, the only check on the fees is regulation. One important question we will consider is whether market data fees are "fair, reasonable, and not unreasonably

discriminatory," the statutory requirement established by Congress in the 1970's. Of course, the alternative is to actually introduce competition into the market for consolidated market data. We will also hear from our witnesses today about what new competition in this field would mean for investors and the markets.

We will also be seeking to learn how investors might benefit if more information about market data costs and fees were made public. While the SROs publish a great deal of information about market data fees on their websites, some information, for example, certain information about pilot programs, is not so readily available. Today we will examine the implications of increasing the transparency of market data terms and conditions.

No discussion of market data can ignore the fact that market data fees play an important role in funding the activities of stock exchanges and the Nasdaq market. But some critics of the current system question how market data revenues should be used – should they subsidize the cost of regulation? Should they be limited to the cost of providing market data? If they are reduced, by competitive forces or otherwise, will investors be subject to new fees to replace the lost revenue? Some suggest that the governance of market data plans, which set market data fees in the first place, should be expanded to include all market participants, like ECNs and the public, as opposed to only the SROs that receive market data revenue. These are some of the issues we will examine today.

In addition to the cost of paying for market data, the current regulatory structure imposes administrative costs on the marketplace. Market participants who purchase consolidated market data face a maze of different types of fee structures and contract requirements. Reducing the administrative burdens associated with the purchase of market data would bring greater efficiency to the marketplace, and ultimately save investors money.

I thank each of our witnesses for coming today to educate the Subcommittee on this very important issue, and look forward to your testimony.

Prepared Statement of Randy MacDonald
Chief Financial Officer, Ameritrade Holding Corporation
Before the House Financial Services Committee,
Subcommittee on Capital Markets, Insurance,
And Government Sponsored Enterprises

March 14, 2001

Chairman Baker, Ranking Member Kanjorski, and distinguished members of the Subcommittee, I am Randy MacDonald, Chief Financial Officer of Ameritrade Holding Corporation, one of the larger brokers in the world as measured by what brokers do – buy and sell securities for investors. Including our pending acquisition of Tradecast, Ameritrade is estimated to be a very close second to the largest, Charles Schwab & Co., Inc. Ameritrade represents about four percent of the total volume of the NYSE and NASDAQ, has a little under 1,500,000 accounts, and holds $28 billion of customer assets. Over 98 percent of our trades occur either through the Internet or over our Interactive Voice Response (IVR) system.

I want to thank you very much for the opportunity to testify before you today on behalf of Ameritrade on the subject of improving transparency and competition surrounding public access to stock market data, a matter of increasing importance, particularly given the strong secular growth of the self-directed investor. I look forward to what I hope will be a fruitful and constructive discussion of how we can improve transparency and competition in market data.

There are four fundamental issues that need to be resolved with regard to the current market data model: (1) market data providers discriminate against the on-line investor with their method for charging for quotes; (2) Ameritrade, solely because it acts as an agent, cannot be

reimbursed for the costs of collecting and redistributing quotes; (3) revenues in excess of the expense of collecting and redistributing quotes should be returned to the people who provided the quotes -- that is, our customers; and (4) SROs are exercising governmental rights to collect market data fees from market participants and then funding for-profit operations, which compete directly with the market participants from whom they have authority to collect the fees.

Ameritrade's goals are: improved access by the public to market quotation data; promotion of markets via deeper liquidity and trading volume; and promotion of competition in the provision of market quotation data. We believe that markets will flourish when investors have confidence in the integrity and fairness of our markets. Market transparency is the cornerstone of such integrity and fairness, and we believe that a basic and important change that would increase transparency and competition in the current system would be to require SRO exclusive processors[1] to show where the money comes from and where it goes. Tracing the market data fee revenues would probably require an audit at least as frequent as SROs require of listed companies.

To a large extent, Ameritrade is agnostic, so to speak, because our primary goal is to execute trades for our principals as efficiently as possible. Ameritrade is not a market-maker or ECN, we do not internalize our order flow, nor do we profit from principal transactions; we act strictly on an agency basis. We connect to a dozen market centers, and in turn to all US exchanges, most major international exchanges, 7 ECNs, and over 450 market makers. Last quarter we saved our clients over $11 million by getting them inside the NBBO with their executions; last quarter 99% of our orders executed at the NBBO or better. The average Internet execution takes less than 6 seconds to execute, according to information from Keynote.com. 90

[1] SROs are exclusive processors in practice versus law.

percent or our executions take place in less than 60 seconds and 75 percent in less than 10 seconds. We pay between $700,000 and $900,000 per month for market data.

In the 1975 Amendments to the Exchange Act of 1934, Congress chose to place basic reliance upon competition to evolve the appropriate structure of securities markets, with regulators in the role of facilitators. History since that time has borne out the wisdom of that policy. When problems occur, they often relate to attempts to regulate the economics of trading. Fixed commission rates are a prime, pre-1975 example of that kind of failure.

Attempts to fix minimum market-maker quotation sizes between mid-1988 and 1997 are another example of efforts to force the market into a pre-conceived regulatory mold. The minimum sizes merely reduced the exposure of bids and offers and widened the bid-ask spreads paid by small investors in automated systems. These fixed minimum exposure limits (5000 shares in most active stocks) were eliminated when the order handling rules were adopted.

The subject matter of today's hearing is yet another example of regulatory intervention that has not worked well. Market data systems do not work as well as they could today because competition is stifled by exclusive processors' unrestrained, monopsonistic (power over suppliers) and monopolistic control over the collection and distribution of quotation and trade report information.

In its invitation to me to testify, the Subcommittee posed specific questions for Ameritrade to answer. Let me now address each of the committee's questions:

1) What are the benefits of the current regulatory structure governing the collection and dissemination of stock market data?

The main benefit of the current structure is very timely delivery of market data.

2) What are the drawbacks of the current regulatory structure governing the collection and dissemination of stock market data?

The inconsistency of distributing delayed quotes is one drawback to the current system. NASDAQ provides the last sale as well as the bid and ask on a delayed basis at no charge. The NYSE will only provide the last sale.

We also understand that certain market-makers and ECNs are now distributing quotes of executions which occurred at their sites. They do not get charged by the exchanges. They encourage people to use these quotes even though they are not the consolidated quote. People may be mistaken about best execution and accept fills from fragmented liquidity pools when they could have gone to another ECN, market maker, exchange or liquidity pool and received a better price. Although brokers have been carefully regulated on this topic it is not clear that ECNs have fully complied with the spirit of this regulation.

3) What are the regulatory impediments to improving the types and quality of market data provided to investors?

A key impediment to market data access is the regulatory and competitive power of the exclusive processors of market data.

Unlike the National Securities Clearing Corporation (NSCC), exclusive processors of market data are not end-user controlled. Self Regulatory Organizations (SROs) and the processing vendors have contracts that require information producers to give up all proprietary rights in the information submitted to the SRO exclusive processors. Their fees have discriminated against online investors. If an Ameritrade customer obtains a quote from one of our brokers over the telephone, such a quote is free, but if they obtain such a quote from our website they must pay a fee.

Discriminatory fees unfairly burden a selected group of individual investors with unnecessary costs. These costs effectively result in restricting their access to information. In January of 2001, Ameritrade paid nearly $1 million in market data fees to AMEX, NASDAQ, NYSE and OPRA.

These fees are the only fees charged directly to investors, and they reduce the transparency of quotes and the market. Ameritrade believes that there should be a *de minimis* exemption level for quote fees that are charged. This is the largest cost of serving inactive traders, and these fees make it very difficult for brokers to profitably serve the small investor.

4) What are the implications of using stock market data revenues to subsidize regulatory or other SRO functions?

One negative implication is where revenues exceed costs. Exacerbating the anti-competitive features of the current market data system is an absence of restraints on the SROs' use of surplus revenues generated by market data sales. Market participants are charged revenues that are excessive. Rather than returning these excess revenues to market participants, these surpluses are used by SROs to create systems that then directly compete with the market participants. We suggest that the SEC should play a more active role in overseeing the SROs, so that we can avoid a classic case of the fox guarding the hen house.

Such a system requires, and really demands, that someone monitor and adjudicate the issue of whether the "cost" that the utilities incur for gathering and redistributing the tape is in fact reasonable.

Another negative implication is ownership of order flow. The small investor who contributes his/her execution to the consolidated tape receives no benefit of the excess revenues.

Yet the consolidated tape was created by the investor entering his/her order. It seems to follow that the value of the order flow should belong to the people who enter the orders.

We are aware that the NASDAQ now has a practice of rebating tape revenue it receives to certain market-makers for NYSE orders executed in the third market. We believe this is done as a form of revenue share so the market-makers will not contribute such order flow through another exchange, so that exchange can claim the tape revenues for such orders. The contracts of NASDAQ (and possibly CTA Consolidated Tape Association) signed by market-makers, and presumably ECN's, require the participant to give up all proprietary rights exclusively to NASDAQ in the data input into the system. Giving up all proprietary rights to market data prevents the recapture of information production costs by those who input information into SRO systems.

Competition is the best friend of the individual investor. Individual investors are especially dependent upon competitive forces to help them capture the efficiencies of the new technologies. Unlike institutions, individual investors do not have the economic power to require lower commissions and a sharing of the order flow value that their orders help to create. Intense competition at the retail level assures that individual investors can effectively demand the prices and services that they wish. The growth of the online brokerage business is a perfect example of this thesis. If there is a flaw in regulatory processes, it is a chronic lack of faith in the ability of markets to effectively regulate the supply, demand, and prices of securities market services.

5) What is the impact of on-line investing on market data use?

The impact is that it exacerbates all of the problems we are talking about here today.

With exclusivity, and the inevitable lack of competition that accompanies it, comes discrimination against on-line investors and higher investment costs for all. The ability of investors to trade electronically on-line has enhanced their execution capabilities dramatically. Because of the ease and speed with which customers may execute transactions, the demand for, and value of, real time market information has increased because more investors now have the ability to act on that information quickly.

We recognize that in order to collect and process quote and trade information efficiently, market information processors must make considerable investments in sophisticated technology. However, it is also important to recognize that the cost of these investments are passed along to broker-dealers like Ameritrade in the form of membership dues, transaction fees, and market data fees. Ameritrade also incurs significant costs in collecting and disseminating these quotes, and furthermore incurs significant costs in administering the contracts with the exclusive processors. And for many broker dealers who cannot afford to directly access the exclusive processors, they must deal with the additional costs, risks, and administrative burdens of dealing with middlemen.

Ultimately these fees end up as hidden costs to individual, on-line investors – costs that investors do not incur if they simply telephone their broker the old-fashioned way. Not only does this result in disparity of treatment of investors, discriminating against on-line investors, but it also has the effect of preserving inefficiencies in the market that otherwise would be considerably reduced. Market data fees paid by Ameritrade are passed on to our customer base of small, on-line investors, both directly and indirectly. For example, for a customer to get real-time streaming quotes, Ameritrade must pay a monthly subscriber fee of $4 (NYSE, NASD, AMEX and OPRA). If a customer only trades once every two months, which is representative of

the average small investor, then Ameritrade's commission is doing no more than recovering the costs of market data.

We know there is no such thing as a free lunch, but something needs to be done to better balance the needs of market information processors on the one hand, with the interests of investors, *all* investors, on the other.

6) What is the significance of transparency of market data terms and conditions to the market?

Because exclusivity breeds problems, there is a strong need for public accountability as an antidote. Exclusive processors should be held accountable to the public by the Congress. To date, the existing authority has not applied the mandates of competition, fairness and transparency contained in the Securities Law regarding the National Market System.

Disclosure, as always, is the best means of preventing abuse by processors of their monopoly power. Accordingly, the SEC should promulgate rules that would provide for public access to the material terms and conditions imposed by exclusive processors in contracts for the provision of market data, and that would require financial disclosure by exclusive processors to allow scrutiny of market data contracts to ensure that they are fair and do not discriminate.

In late July, 2000, then-Chairman of the SEC, Arthur Levitt, announced the establishment of the Federal Advisory Committee on Market Information, to be chaired by Professor Joel Seligman, Dean of the Washington University School of Law in St. Louis. Among the specific market information issues that the Seligman Committee was charged with considering was the value of transparency to the markets and how market information fees should be determined (including the role of public disclosure of market information costs, fees, revenues, and other matters, and how the fairness and reasonableness of fees should be evaluated). We understand

that the Seligman Committee may be coming out with its findings soon. We believe that the work of the Seligman Committee will likely provide valuable information that ought to be considered as Congress considers the market data issue. We trust that the Seligman Committee will recognize the danger of declaring market data a "free good." If such a finding were to be implemented, it would in effect be an expropriation of market data from processors. This would leave the cost of collection and redistribution of market data to be absorbed without any fees to cover the cost. We want to make clear that Ameritrade would not favor such a move. We do not like the current system where processors claim exclusive rights to the market data, which enables them to subsidize other aspects of their enterprise, which compete with market participants. We would be in favor of brokers who enter order information and exclusive processors being able to recover their costs from tape revenue.

In closing, We at Ameritrade want to applaud the efforts of you and your colleagues in Congress, as well as the efforts by the SEC and the Seligman Committee, to address the need for transparency and competition in the provision of securities market data. We stand ready and willing to assist you in any way that we can to find a solution to this problem. We encourage you to act soon, because the sooner these barriers to competition and fair treatment of all investors are removed, the sooner our markets can benefit from the increased efficiencies that will ensue.

Testimony

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NYSE

Robert G. Britz

Group Executive Vice President
Operations Group

On
Public Access to Stock Market Data – Improving Transparency and Competition

Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises

Committee on Financial Services
United States House of Representatives

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Chairman Baker, Vice Chairman Ney, Ranking Member Kanjorski and Members of the Subcommittee, I am Robert G. Britz, Group Executive Vice President of the New York Stock Exchange, Inc. ("NYSE" or "Exchange"). The Exchange's equities group, which I lead, is responsible for the day-to-day operation of our market and our data processing sites, for our technical infrastructure and software development, and for our information business, which includes market data.

On behalf of the NYSE and our Chairman, Richard A. Grasso, I thank the Subcommittee for providing this forum for discussing the subject of market data and for the opportunity to appear before you this morning. We believe that advancements in technology create an opportunity for deregulation and enhanced competition in this arena, making the Subcommittee's hearings particularly timely.

THE "WHAT", "HOW" AND "WHY" OF MARKET DATA

Allow me to "set the table" for my remarks by briefly defining what "market data" is, how it is disseminated and regulated, and why it is so vital to capital formation.

"Market data" includes last sale prices, which are the most recent reports of prices at which stocks have traded. Market data also includes bid and asked quotations, which are the highest announced bid price that buyers in our market are willing to pay, and the lowest announced offer price that sellers in our market are willing to accept.

In 1975, Congress extensively amended the Securities Exchange Act of 1934 to strengthen the oversight of the Securities and Exchange Commission over the Exchange and other self-regulatory organizations. Among many other changes, it directed the SEC to facilitate the creation of a "national market system", or "NMS", among the NYSE, the other exchanges and the National Association of Securities Dealers. In assigning the SEC that responsibility, Congress gave the SEC broad powers to regulate the dissemination of market data, including authority to require the SROs to disseminate market data jointly.

Since that time, the Exchange has participated with the other SROs in a market data consortium called the "Consolidated Tape Association", or "CTA". Pursuant to a joint venture agreement called the "CTA Plan", which has been filed with and approved by the SEC under its NMS authority, the SROs jointly:

- Operate the facilities to consolidated and disseminate market data,
- Govern the terms and conditions of the receipt, re-dissemination and use of market data through SEC-filed contracts with vendors, broker-dealers and other users of market data,
- Charge for market data pursuant to fees filed with the SEC, and
- Share the net revenues.

As the largest market for the trading of the stocks it lists - the NYSE executes more than four times the number of shares as all other markets combined - the NYSE administers CTA's contracts and fee structure.

Criticism of the consortium and of the SEC's stewardship led the SEC in December 1999 to issue a concept release on market data that included proposals to add additional layers of bureaucracy to the consortium and to embrace a utility ratemaking model. The responses to the release underscored the divergence of views among SROs, vendors and broker-dealers, prompting the SEC to bring together two dozen representatives of those groups and others in an Advisory Committee on Market Information. Joel Seligman, Dean of the Washington University School of Law at St. Louis, chairs the committee. I serve as the Exchange's representative.

MARKET DATA AND CAPITAL FORMATION

Allow me to turn now to the question of why market data is so vital to capital formation.

If I mention the New York Stock Exchange to you, I may evoke an image of our columned façade on Broad Street, or of men and women rushing across our trading floor in order to get their customers the best price, or of the 3000 great U.S. and non-U.S.

companies that privilege us by listing their stock. Or you might think of our computers and fiber optics that enable us to trade 6.0 billion shares a day – in decimals – without a hitch. Or I might call to mind my 550 colleagues who regulate Merrill Lynch, Goldman Sachs and our other great member organizations.

Each of these images would be accurate.

But you would not have identified our core product:

Market data.

When two investors trade, the execution is important to just them. But the ***price*** of the trade is important to millions of others around the world - for deciding their next market action, for pricing their portfolios, for valuing their stock options and for providing a report card on how well management is discharging its responsibilities to them as shareholders.

Said another way, the NYSE exists to manufacture stock prices and distribute them pervasively. We tell the world what a fine slice of ownership - a single share - of the global enterprise that is Exxon, for example, is worth on a moment-by-moment basis. Through our auction, we take raw material - orders from investors entrusted to brokers, some with vast distribution capabilities, others with simply a telephone and a workstation on our trading floor - and turn it into a snapshot of a corporation's value. Our "factory" is not merely the trading floor itself, but a vast, fast, secure and reliable delivery and reporting system. Moreover, the entire process occurs in a "fishbowl" - literally on national television, but also through the immediate and broad dissemination of the data and under the watchful eye of those 550 of my partners that work in our Regulatory Group.

WHY CONTROVERSY?

Before I turn to the five specific issues concerning market data that Chairman Baker included in his March 9 letter to our Chairman, I owe you my best explanation as to why there has been so much discussion about market data over the past several years. But, to tell you the truth, I am surprised myself.

Notwithstanding its vital importance to the efficient functioning of our capital markets, market data is by no means a glamorous part of our business. It's like the water supply – everyone takes it for granted until the day that the faucet drips rust. Indeed, given the regulatory scheme I have mentioned, it can get downright arcane.

So, while I may not be much help in telling you "what all the noise is about", I can tell you what it is ***not*** about:

- It is clearly not about ***access*** by investors to market data - they cannot avoid it.
- It cannot be about the ***cost*** of data to investors – it's free.

- And it cannot be about the cost of data to ***brokers*** - the cost has declined dramatically over the past 25 years and, in any event, brokers levy the fees on themselves.

Allow me to back up my observations with some explanation.

CONSUMERS HAVE FREE ACCESS

Individual investors, and the general public for that matter, have access to unlimited real time data through a wide variety of delivery systems - PC's, telephone, television, PDA's, pagers, automated teller machines, etc. Market data is available in the home and in public places - libraries, schools, airports, restaurants, train stations, shopping malls and literally on the street. In contrast to commentators who imply that investors are struggling for access to real-time data, in truth, it is hard to avoid it. Simply stated, the data is pervasive and, from many sources, absolutely FREE.

COSTS HAVE FALLEN DRAMATICALLY

As I have noted, consumers do not pay market data fees. As that fact has become more generally understood, much of the "debate" about the pricing of market data has shifted to the question of how much of the costs of funding the Exchange should be allocated among broker-dealers through fees denominated as "market data" fees.

This, too, turns out to be a very curious debate. Since the Exchange began collecting market data fees 130 years ago, our broker-dealer members have been levying the fees on themselves.

Moreover, for at least 75 years (our budget archives do not go back any further), the contribution of market data fees to our overall revenue has never exceeded 25 percent. It has not breached 18 percent since Congress first legislated in this area in 1975. In addition, over the past 15 years, the cost of our market data has declined dramatically – more than 80 percent. Prices for our market data have either declined or remained unchanged.

USERS LEVY FEES ON THEMSELVES

Why this is so presents no mystery. The NYSE does not so much establish prices as allocate costs. Representatives of our constituents - member broker-dealers, listed companies, institutional investors and the public at large - establish NYSE prices by first determining the NYSE's funding needs, and then allocating the resulting costs among themselves.

Twenty-four men and women long experienced in business and the public sector -- 21 who are CEOs of users of Exchange services and three who are Public Directors with no financial interest in the outcome -- determine the Exchange's funding. They then allocate most of the non-regulatory costs of running the Exchange between listed companies and member broker-dealers

(with institutional investors and other non-members contributing the balance) by establishing fees denominated as "listing fees", "transaction fees" and "market data fees". If they change the allocation, it must withstand scrutiny by Board representatives of potential "winners" and "losers", as well as by the Directors representing solely the public interest.

Board action is the last stop in our constituent process. Before the Board reallocates any costs, Exchange staff vets the proposed change with user groups. In the case of market data fees, the process includes our ongoing interaction with broker-dealers (and market data vendors) in the course of our providing services to them, as well as our ongoing participation in industry associations. The NYSE staff seeks consensus by discussing new fee ideas with constituents who advocate their varying business models.

That this mechanism produces a fair result does not surprise economists. Through their representatives, the users of a complex, interdependent set of services determine what they pay. In fact, Congress itself recognized that this kind of competition among users produces the best and fairest allocation of costs: in 1975, it wrote into the 1934 Act requirements that exchanges afford fair representation of brokers, issuers and investors and fairly allocate costs among them.

Were the "belt" of constituent cost allocation ever to break, the SEC review process provides "suspenders". However, in the 26 years since Congress authorized the SEC to regulate market data fees, the SEC has never rejected a CTA fee proposal as being unfair or unreasonably discriminatory. Indeed, only recently have the SEC "suspenders" come into play -- not because of a ***failure*** of fair allocation, but because of a single user's campaign to ***avoid*** it.

Maybe it's because we both got our start in 1792, but the idea of our constituents allocating the costs of running the Exchange among themselves is no different in principal than the budgetary and tax process here in Congress. Acting through their Board representatives, the Exchange's constituents arrive at a fair allocation of costs through give-and-take. These Board representatives recognize that their constituents all benefit from funding the Exchange -- and that each user must contribute its fair share.

The long-term stability in the proportion of our costs covered by market data fees has transcended the ebb and flow of the particular business models of our constituents. Nevertheless, because those who approve the Exchange's budget and its market data (and other) fees are the ones who pay, the role of market data fees in our funding is far from immutable. Our constituents can raise or lower any fee -- thereby reallocating among themselves the costs of operating the Exchange -- any time they want.

WITHDRAWAL FROM THE MARKET DATA CONSORTIUM

You may be aware that the Exchange has advised the SEC that it wishes to withdraw from the CTA consortium. In view of our solid track record of making a high-quality data service ubiquitously, inexpensively and reliably available to securities professionals and consumers, as well as the fair way in which we allocate our costs, this determination by our Board of Director's last April might surprise you.

Let me say that it is not at our initiative that we propose to end our joint effort with the other SROs, any more than it was at our initiative that we began it in the first place. The impetus came from the SEC's December 1999 concept release on market data, which, as I noted, proposed to add new layers of bureaucracy and to embrace a utility ratemaking model. It also came from the growing dysfunction of the SRO consortium in the face of the nation's evolving securities market structure.

We have been confirmed in our course by the subsequent crystallization of the legal perils of joint activity even when taken within the framework of an SEC-approved plan.[1] We are also troubled by the contradiction between continued joint dissemination and the prescription last year by the Antitrust Division and the SEC that each exchange must acquire and manage its own data transmission capacity independently.[2]

Our decision stems from our belief that technology and market forces provide a workable way for the NYSE and the rest of the industry to assure the display of consolidated data after the NYSE's exit. So we believe the consortium is no longer necessary.

But, to be clear, the NYSE is not calling for the abolition of the SRO consortium. Nor do we believe our withdrawal will trigger any crisis in data consolidation and dissemination. Similarly, we are not trying to promote a new market data distribution model for the industry. That would be both presumptuous and well beyond our ambition to exit the consortium.

THE WORK OF THE SELIGMAN COMMITTEE

As my remarks suggest, the Subcommittee is joining a conversation among the SEC, the SROs and the users of market data that began in earnest when the SEC issued its 1999 concept release. That conversation continues in the work of the Seligman Committee. The Exchange recognizes that the issues are complex and arcane, and believes that the SEC's effort to clarify the issues and search for consensus through its advisory committee deserves to be given a chance. Accordingly, the Exchange has deferred formally seeking approval of the SEC for its withdrawal from the SRO consortium, and is participating actively in the Seligman Committee's work.

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[1] Recently-settled proceedings of the Antitrust Division of the Department of Justice and the SEC alleged that a decision taken by the Amex, CBOE, PCX and PHLX to limit the capacity of OPRA effectively constrained multiple trading in certain options classes. *United States v. American Stock Exchange et al.*, No. 1:00CV02174 (D.D.C. filed Sept. 11, 2000), Complaint at 10; *In the Matter of Certain Activities of Options Exchanges*, AP File No. 3-10282, Exchange Act Release No. 43268 (Sept. 11, 2000), Order Instituting Public Administrative Proceedings Pursuant to Section 19(h)(1) of the Securities Exchange Act of 1934, Making Findings and Imposing Remedial Sanctions at 4, 6.

[2] The settlement in the options antitrust matter imposed the prescription on the Amex, CBOE, PCX and PHLX. See *United States v. American Stock Exchange et al.*, Competitive Impact Statement of United States at 21. At the May 10, 2000 CTA meeting, the SEC staff requested that the constituent exchanges file amendments to the CTA Plan that would meet this independent capacity standard as well.

Both in response to the concept release and in the context of the Seligman Committee's deliberations, the Exchange has worked hard to articulate its views over the last year. So that you may have the benefit of our efforts, we submit for the record three key position papers:

- **Exhibit A**, which is our 2-1/2 page explanation of how the users of market data establish market data rates through their representatives on the NYSE Board of Directors: my February 8, 2001, letter to the Members of the SEC Advisory Committee on Market Information, "Market Power in Pricing Market Data",

- **Exhibit B**, which is our 13-page description of how market data would continue to be disseminated after our withdrawal from the consortium: my December 1, 2000, letter to Dean Seligman, "Competing Consolidators Model", and

- **Exhibit C**, which is the 23-page cover letter summarizing and transmitting our 240-page response to the SEC's concept release: "Comments to Securities and Exchange Commission Concept Release on 'Regulation of Market Information Fees and Revenues'" (April 10, 2000). Exhibit C also includes the table of contents for the full response, which is available in its entirety at http://www.sec.gov/rules/s72899.htm.

We hope these submissions contribute to your work.

SPECIFIC ISSUES

In regard to the five specific issues that Chairman Baker included in his March 9 letter to our Chairman, allow me to briefly summarize our views and direct the Subcommittee and its staff to our more detailed discussions in our three submissions:

Benefits and Drawbacks of the Current Regulatory Structure - The current regulatory scheme depends in large part on otherwise vibrantly competing exchanges coming together in consortium to disseminate market data, to set prices for that data and to share the resulting revenues. As noted, our decision to withdraw from the consortium recognizes that today's technology and market forces provide a workable way for the NYSE and the rest of the industry to assure the display of consolidated data after the NYSE's exit. It further recognizes that here, as in other areas of the economy, the best answer lies in unleashing market forces and relying on constituent self-determination. (Please see: Exhibit A; Exhibit C, pp. 3-6, and its Appendix B, pp. 9-20.)

Impact of Technology on Market Data Use - The phenomenal growth of consumers' use of market data is part of the "democratization" of investing made possible by the huge drop in the cost of technology, manifested by the general communications explosion, including cable TV and the internet. At the end of 1998, 34 million consumers owned stocks directly, and another 50 million invested through mutual funds and other vehicles.

The Exchange facilitated this democratization by enabling the real-time broadcast of market data on cable TV in 1996 and through pilot programs for market data fees in the early 1990s that allowed broker-dealers and market data vendors to experiment with non-traditional bases for paying for market data. In 1999, we codified the most successful of the pilot programs. (Please see Exhibit C, pp. 11-13, and its Appendix D, pp. 4, 13-17, and its Appendix E, pp. 6-8.)

Funding of SROs in Part by Market Data Fees - For at least 75 years, market data users have shouldered about one-fifth of the costs of operating the Exchange through market data fees. But market data fees, taken together with transaction fees, have never come close to covering the cost of operating the Exchange's market and making the investments in our technical infrastructure necessary to maintain and enhance their operating stability. Listing fees have covered the difference. Listing fees have also made up the difference between the costs of regulation and the revenue from regulatory fees, although fees levied on Floor members introduced at the beginning of this year have moved regulation even closer to self-funding. (Please see Exhibit A; Exhibit B, p. 2; Exhibit C, pp. 13-15, 21, and its Appendix D, p. 8.)

Regulatory Impediments to Improvements - The key regulatory issues surfaced by the Seligman Committee pertain to the SEC requirements that SROs consolidate and jointly disseminate market data and that vendors and that broker-dealers display all markets' data. The core debate within the committee turns on the tension between (1) removing these requirements as a means of introducing sufficient SRO competition into the arena to address cross-subsidies and to further discipline pricing and service and (2) concern that both the quality of the data and the general availability of all markets' data would be impaired. (Please see Exhibit C, pp. 19-22.)

Transparency of Market Data Terms and Conditions – While more may need to be done, I note that:

- The dissemination of market data occurs under the pervasive oversight of the SEC, including attendance by the SEC staff at consortium meetings.
- The SEC publishes amendments to the joint venture agreement and fee changes in the Federal Register for public comment.
- Give-and-take among market data users at the SRO boards determines pricing decisions and other key matters.
- The ongoing contact between the Exchange staff and market data vendors and users, and the staff's participation in industry groups, give rise to fee changes and other initiatives.
- We publish all of our fees, as well as our principal contract forms, on our public web site.
- We file audited consortium financial statements with the SEC, from which they are available.
- Each SRO publishes and widely disseminates an annual report that includes audited financial information.

(Please see Exhibit C's Appendix E, pp. 9-11.)

* * *

I hope the foregoing is helpful to the Subcommittee. We look forward to working with the House Financial Services Committee on issues affecting the capital markets.

Thank you again for the opportunity to present this testimony. I would be happy to answer any questions that you may have.

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Exhibit A

February 8, 2001

Re: Market Power in Pricing Market Data

Dear Members of the SEC Advisory Committee on Market Information:

During our December 14 meeting, several participants discussed the issue of "market power" as we move to a competitive market data landscape. Others voiced questions about the governance of the SRO consortia. It occurred to me that some of the comments might reflect an understandable lack of knowledge of the business history of CTA in particular, and of the governance process of CTA and its SRO participants.

As one of two dozen meeting participants, I did not want to take up others' time in making clarifying comments. Thus, I am writing now. Since the history, structure, corporate form and governance of CTA and the NYSE differ significantly and relevantly from those of the OTC/UTP dissemination and NASD/NASDAQ, I confine my remarks to CTA and the NYSE.

Any concern that the NYSE could and might exercise market power in a competitive environment for market data ignores 75 years of evidence to the contrary. It also ignores the discipline that derives from the constituent nature of NYSE governance. Moving to a competitive model will not relax that discipline.

NO EVIDENCE OF THE EXERCISE OF MARKET POWER

If the NYSE (or CTA) were exercising market power in the pricing of market data, one would expect, for example, a history of price increases. Yet, to the contrary, the prices for NYSE/CTA market data services have either declined or remained unchanged since the mid-1970s. That helps to explain why the cost of CTA market data has declined 81 percent over the past 15 years. That result is wholly inconsistent with the hypothesis of a dominant entity exercising market power.

Market power might also manifest itself as a rising contribution of market data fees to NYSE revenue. In fact, the proportion has oscillated between 15 and 17 percent since CTA's creation. That proportion long precedes the advent in the mid-1970s of both the CTA consortium and the SEC's oversight of market data fees: we have traced it back to the 1930s.

If there is latent market power, then something is disciplining its use.

USERS LEVY FEES ON THEMSELVES

The source of this discipline is no mystery. The NYSE does not so much establish prices as allocate costs. Constituent representatives establish NYSE prices by first determining the NYSE's funding needs, and then allocating the resulting costs among themselves.

Twenty-four men and women long experienced in business and the public sector -- 21 who are CEOs of users of Exchange services and three who are Public Directors with no financial interest in the outcome -- determine the Exchange's funding. They then allocate most of the non-regulatory costs of running the Exchange between listed companies and member broker-dealers (with institutional investors and other non-members contributing the balance) by establishing fees denominated as "listing fees", "transaction fees" and "market data fees". If they change the allocation, it must withstand scrutiny by constituent proxies -- Board representatives of potential "winners" and "losers" in the reallocation -- as well as by the Directors representing solely the public interest.

Board action is the last stop in our constituent process. Before the Board reallocates any costs, Exchange staff vets the proposed change with user groups. In the case of market data fees, the process includes our daily interaction with brokers (and vendors) in the course of our providing services to them, as well as our ongoing participation in industry associations. The NYSE staff seeks consensus by discussing new fee ideas with constituents who advocate their varying business models.

That this mechanism produces a fair result does not surprise economists. Through their proxies, the consumers of a complex, interdependent set of services determine what they pay. Congress recognized that this kind of competition among users produces the best and fairest allocation of costs: in 1975, it wrote into the 1934 Act requirements that exchanges afford fair representation of brokers, issuers and investors and fairly allocate costs among them.

Were the "belt" of constituent cost allocation ever to break, the SEC review process provides "suspenders". However, in the 26 years since Congress authorized the SEC to regulate market data fees, only once have the "suspenders" come into play -- not because of a ***failure*** of fair allocation, but because of a single user's campaign to ***avoid*** it.

I did not mention CTA in describing how costs are fairly allocated. This reflects reality. The SROs have never delegated fee matters to CTA: the SRO boards decide fee matters directly.

* * *

To be sure, adopting a competitive model will bring market forces to bear on market data pricing. But the primary discipline on any latent market power will remain the same: our constituents allocating the costs of running the Exchange among themselves. They arrive at fair allocation, not because of a statutory mandate or altruism, but because of the give-and-take among their Board representatives. These representatives recognize that their firms all benefit from funding the Exchange -- and that each user must contribute its fair share.

Simply put, those who approve the Exchange's budget and market data (and other) fees are the ones who pay. They can raise or lower any fee -- thereby reallocating among themselves the costs of operating the Exchange -- any time they want.

I hope the foregoing is helpful to you as the Committee pursues its important work.

Sincerely yours,

/s/ Robert G. Britz

Robert G. Britz

cc: Annette Nazareth
Robert Colby

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Exhibit B

December 1, 2000

Mr. Joel Seligman
Dean and Ethan A. H. Shipley University Professor
Washington University School of Law
1 Brookings Drive
Campus Box 1120
St. Louis, MO 63130

Re: Competing Consolidators Model

Dear Dean Seligman:

By your October 26 email to the members of the SEC Advisory Committee on Market Information, you requested that members who have ideas for alternatives to the current "consortium consolidator" model describe their ideas in writing. By this letter, the New York Stock Exchange responds to your request. We describe below how a model involving competition among multiple, non-exclusive consolidators (the "competing consolidators" model) might work.

First, we explain why we believe the competing consolidators model is a better way to address the problems with the consortia than the proposals in the SEC's concept release on market data.[1] We then provide an overview of how the competing consolidators model might work. In the balance of this letter, we respond to the specific questions (somewhat re-ordered for the sake of logical progression) that you posed in your October 26 email.

INTRODUCTION

As we described at length in our submission responding to the SEC's concept release on market data,[2] over the last 25 years, CTA/CQ has established a solid track record of making a high-

[1] Release No. 34-42208 (December 9, 1999).

[2] See "Comments to Securities and Exchange Commission Concept Release on 'Regulation of Market Information Fees and Revenues'" (April 10, 2000; the "NYSE Concept Release Response") at pp. 11-13 and Appendix D.

(Footnote continues on next page.)

quality data service ubiquitously, inexpensively and reliably available to securities professionals and consumers. As we also pointed out, we believe that, because proposed CTA/CQ fees are vetted with the industry, approved by the constituent governance processes of the nine exchanges[3], and subjected to SEC review and public comment, the market data revenue that the NYSE receives reflects a fair allocation of the NYSE's costs. In short, it is not at our initiative that we propose to end our joint effort with the other exchanges, any more than it was at our initiative that we began that joint effort in the first place.

But the concept release's proposals to add additional layers of bureaucracy and to embrace a utility ratemaking model, as well as the growing dysfunction of CTA/CQ in the face of evolving market structure, led our Board last April to determine that we should withdraw from the CTA/CQ Plans. We are confirmed in our course by the subsequent crystallization of the legal perils of joint activity even when taken within the framework of an SEC-approved plan,[4] and by the contradiction between continued joint dissemination and the prescription by the Antitrust Division and the SEC that each exchange must acquire and manage its own data transmission capacity independently.[5]

Our decision recognizes that technology and market forces provide a workable way for the NYSE and the rest of the industry to assure the display of consolidated data after the NYSE's exit. It also recognizes that we have the right under the CTA/CQ Plans to withdraw so long as we demonstrate to the satisfaction of the SEC that we will continue to meet the requirements of the applicable SEC rules.

But, to be clear, the NYSE is not calling for the abolition of CTA/CQ. Nor do we believe our withdrawal will trigger any crisis in data consolidation and dissemination. Similarly, we are not trying to promote a new market data distribution model for the industry, which would be both presumptuous and well beyond our ambition to exit CTA/CQ.

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[3] For the sake of simplicity, in view of NASDAQ's anticipated registration as a national securities exchange, this letter generally does not address the continuing role of the NASD in reporting internalized executions and other off-board trades.

[4] Recently-settled proceedings of the Antitrust Division of the Department of Justice and the SEC alleged that a decision taken by the Amex, CBOE, PCX and PHLX to limit the capacity of OPRA effectively constrained multiple trading in certain options classes. *United States v. American Stock Exchange et al.*, No. 1:00CV02174 (D.D.C. filed Sept. 11, 2000), Complaint at 10; *In the Matter of Certain Activities of Options Exchanges*, AP File No. 3-10282, Exchange Act Release No. 43268 (Sept. 11, 2000), Order Instituting Public Administrative Proceedings Pursuant to Section 19(h)(1) of the Securities Exchange Act of 1934, Making Findings and Imposing Remedial Sanctions at 4, 6.

[5] The settlement in the options antitrust matter imposed the prescription on the Amex, CBOE, PCX and PHLX. See *United States v. American Stock Exchange et al.*, Competitive Impact Statement of United States at 21. At the May 10, 2000 CTA meeting, the SEC staff requested that the constituent exchanges file amendments to the CTA and CQ Plans that would meet this independent capacity standard as well.

Nevertheless, we recognize that, by definition, our withdrawal will create the potential for multiple consolidators for the securities we list, and will somewhat alter the market data landscape. We also recognize that our action will create a template that other exchanges may wish to use or extend. That could change the market data landscape more significantly.

While the NYSE is not advocating any particular model for the industry, we have thought through what the market data industry structure might look like following our withdrawal from CTA/CQ. In response to your request, we are pleased to share our thinking with the Committee.

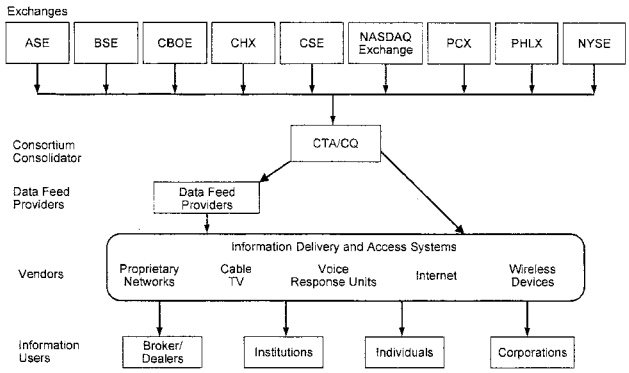
OVERVIEW

Current Model (Consortium Consolidator)

Under the CTA/CQ Plans, the nine exchanges (1) establish and collect common charges, (2) jointly enter into and administer contracts regulating the terms of receipt of last sale prices and quotation information and (3) oversee a common processing and data distribution facility. The nine exchanges select an exclusive processor to operate their common data facility.[6] For the purposes of this letter, the consortium processor's functions may usefully be delineated as three: (1) collecting each of the nine exchanges' data output (the "single-exchange data feed function"), (2) consolidating the nine exchanges' data (the "consortium consolidation function") and (3) providing a consolidated data feed to anyone who wishes to avail itself of it (the "consolidated data feed function"). Diagram 1 shows the current data distribution arrangement.

[6]Since the CTA/CQ Plans' inception, the constituent exchanges have contracted with the Securities Industry Automation Corporation ("SIAC") to act as the consortium processor.

Diagram 1 - Consortium Consolidator Model



As is depicted in Diagram 1, the CTA/CQ consortium processor provides a consolidated feed directly to 62 entities that can be divided into two categories: (1) those that provide data feed services to others (depicted as "Data Feed Providers" in Diagram 1) and (2) those that solely service end-users or their own internal use (depicted as "Vendors" and "Information Users" in the diagram).[7] The 62 direct recipients comprise eight exchanges, three press organizations, 18 vendors and 33 broker-dealers. Most of the 18 vendors (Bridge, ILX, Reuters, S&P Comstock, etc.), as well as a few broker-dealers, offer data feed services. These services typically supplement the consortium feed with consolidated options and OTC stock data, as well as data from domestic futures exchanges and from non-U.S. exchanges.

In addition, approximately 1400 vendors and information users receive consolidated data indirectly, through one or more of the data feed providers. For the most part, these indirect recipients are broker-dealers, institutions and others that redistribute data internally to their employees and, more recently in the case of broker-dealers, to their retail customers.

Competing Consolidators Model

The competing consolidators model unbundles several functions currently performed at the consortium level. Upon the NYSE's withdrawal from the CTA/CQ Plans, the NYSE would (1)

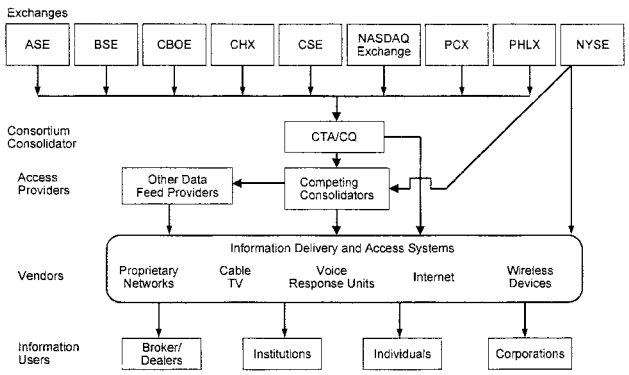
[7] Note that the diagram simplifies the market data industry by depicting as discrete several functions that are often combined within the same entity (e.g., a data feed provider typically also provides interrogation services to its own employees or customers). This simplification is not material to the changes suggested by the competing consolidators model.

separately establish and collect its own fees, (2) separately enter into and administer its own contracts regulating the terms of receipt of its last sale prices and quotation information and (3) provide its own data distribution facility. The NYSE will use the services of SIAC (its data processing subsidiary) to operate this NYSE-only facility. However, its facility would only perform the single-exchange data feed function. Diagram 2 illustrates this revised arrangement.

As depicted in Diagram 2, to disseminate consolidated data, direct data feed recipients would have to:

- Take two data feeds – the consortium feed (which no longer includes NYSE data) and (2) the NYSE-only feed, and
- Perform the consolidation function and the consolidated data feed function.

Diagram 2 - Competing Consolidators Model



Any data feed provider (including SIAC[8]) or other data processing firm could enter this non-exclusive consolidation business. (Such data feed providers and firms are separately delineated as "Competing Consolidators" in Diagram 2.) Any data feed provider that does not enter the consolidation business, as well as any of the other 62 direct recipients that choose not to enter the consolidation business, would have to contract to receive consolidated data from a competing consolidator.

Similarly, any of the 1400 indirect data feed recipients that does not wish to avail itself of the consolidation services provided by the competing consolidators could choose to self-consolidate

[8] Outside of its consortium role, SIAC becomes just one more data feed provider serving the information industry.

(depicted in Diagram 2 by the arrows from CTA/CQ and from the NYSE that bypass the competing consolidators box). The rest of the indirect recipients would continue to receive consolidated data feeds. Professional and nonprofessional subscribers (depicted in the diagrams as "Information Users") would also continue to receive consolidated data services.

Appendix A traces the flow of data from the input of an order into the NYSE systems through display under the competing consolidators model.

Extended Competing Consolidators Model

The model also works if other exchanges -- or all exchanges -- withdraw from the CTA/CQ Plans. We anticipate that it would also work if they withdraw from the OTC/UTP Plan and the OPRA Plan as well (in which case consortium consolidation would disappear altogether). Diagram 3 illustrates the model as extended to all CTA/CQ exchanges. Note that the schematic is actually simpler than that of Diagram 2, since the consortium consolidator box (CTA/CQ) disappears altogether.

Comparative System Costs

Most of the costs of market data are internal to the nine exchanges, taking the form of developing, deploying and operating the technical infrastructure to support the production and dissemination of the data. The competing consolidators model implies no changes to these costs. However, the NYSE's withdrawal would affect the portion of the dissemination costs that are currently pooled.[9]

The nine CTA/CQ exchanges currently share the approximately $6.6 million in costs annually incurred by the consortium consolidator in providing the single-exchange data feed functions, the consolidation function and the consolidated data feed function. While these costs are tiny when compared to the overall costs of the market data industry, we believe these costs could well decrease, at least under the extended competing consolidators model.

Under the extended model, each exchange would incur the cost of its single-exchange data feed function individually, and competing consolidators would take on the costs of the consolidation function and the consolidated data feed function.

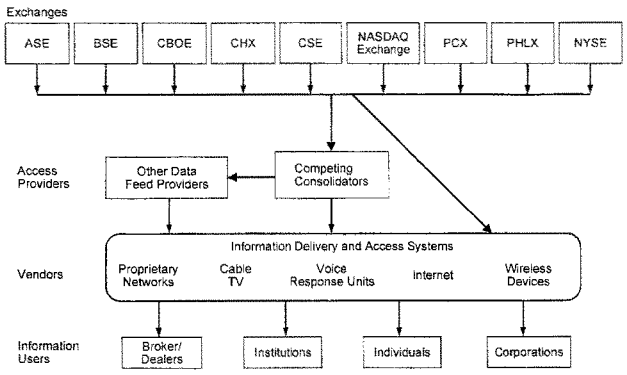
- **Single-Exchange Data Feed Costs** – Predicting the outcome as to the costs of the single-exchange data feed functions under the extended model is highly speculative since each exchange would, for the first time, independently enjoy a variety of insourcing and outsourcing alternatives that would tend to drive costs down.

[9] Note that we are focused in this section solely on a steady-state analysis of the system changes necessitated by the NYSE's withdrawal, asking whether proliferating the number of connections with exchanges and the number of consolidators implies the creation of repetitive facilities and, therefore, the incurring of increased costs. We address fees separately below.

However, one can bound the costs at the upside by observing that, if the NASDAQ Exchange simply used its existing data processing facilities and the other exchanges simply continued to use SIAC for this purpose, these costs would change little.

- **Consolidation and Consolidated Data Feed Costs** – As noted, the competing consolidators model will completely subject these aspects of the dissemination system to market forces. Moreover, among most likely entrants into the competing consolidators business are the existing data feed providers, which already process the consolidated feed (i.e., they would require little incremental capacity); already handle scores of data feeds from the consortium consolidators, the several domestic futures exchanges and exchanges around the world; and already provide data feed services to 1400 vendors, broker-dealers and others. Thus, it is unclear whether they would have material incremental costs in taking on the consolidation function. As a result, the extended model might take the portion of the $6.6 million attributable to consortium consolidation and consortium consolidated data feeds completely out of the overall system, rather than merely shifting them from the consortia to the consolidators.

Diagram 3 - Extended Competing Consolidators Model



RESPONSES TO QUESTIONS

Who will act as competing consolidators?

Under the competing consolidators model, neither SIAC nor any other entity would serve as the exclusive source of consolidated trades and quotes. Instead, any entity could pick up the consortium and NYSE data streams, consolidate the streams and make the resulting consolidated stream available to vendors, broker-dealers and investors.

The broad universe of possible non-exclusive consolidators includes current industry participants (i.e., SIAC and the data processing subsidiaries of other exchanges, as well existing data feed providers). The non-exclusive, competing consolidators would compete to provide consolidation services, just as they compete today to provide data feeds.[10]

How will competing consolidators obtain market information?

Today, SIAC and the nine exchanges install lines by which each exchange sends its trades and quotes to SIAC for validation, consolidation and dissemination. Pursuant to the CTA/CQ Plans and bilateral contracts, SIAC acts as each exchange's agent in this activity. It neither enters into contracts with, nor collects fees on, the vendors, broker-dealers and others that gain access to the consolidated data from SIAC. Instead, the exchanges compensate SIAC for its work from the pool of revenues that they jointly collect from data users.

Under the competing consolidators model, CTA/CQ would provide the consortium feed (no longer including NYSE data), and the NYSE would provide the NYSE-only feed, to the competing consolidators and to vendors, broker-dealers and others that self-consolidate. As CTA/CQ does today, the NYSE would use IP multicasting protocols (or comparable distribution mechanisms) and require consolidators to receive the data over at least a T1 communications line (thereby minimizing any latency delays that might result from lower line speeds).[11]

How will competing consolidators make market information available to users?

Competing consolidators would provide consolidated data to the approximately 1400 broker-dealers, institutions and other indirect data feed recipients in the same way that that they provide data feed services today. In turn, the indirect data feed recipients would disseminate consolidated data to end-user devices in the same ways as they do today.

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[10] While we have not generally assessed the interest of data feed providers in entering the competing consolidator business, SIAC has indicated its strong interest in doing do.

[11] Under the "concurrent use" provisions of the CTA/CQ Plans, SIAC already performs single-exchange data feed functions on behalf of the several exchanges that make available through SIAC data that is not consolidated, e.g., index values and trades and quotes in local securities. In performing these single-exchange data feed functions, SIAC does not act for all nine exchanges collectively, but solely for the exchange whose data it processes. SIAC is compensated for providing those bilateral services under the general arrangements of the CTA/CQ Plans. (As noted above, SIAC will perform the single-exchange data feed function on behalf of the NYSE.)

Any other exchange withdrawing from any of the consortia would have to either create its own capability to make its data available to consolidators or enter into bilateral arrangements with a data processing firm to provide a feed of its data to consolidators. While we have not generally assessed the interest of data processing firms in performing this function, SIAC has indicated its strong interest in doing so.

How will brokers satisfy their best execution responsibilities under the competing consolidators model?

As noted, the competing consolidators model would make no change in the ability of end-user devices to continue to receive consolidated data. Thus, the model implies no change in the manner in which brokers satisfy their best execution responsibilities and, in particular, in the availability of the NBBO and the other consolidated data necessary to comply with the recently-adopted rules on disclosure of execution quality.[12]

How will terms, including fees, for information be determined?

Each competing consolidator would administer its own business. It would assume responsibility for assuring that it has sufficient capacity to receive and process all nine exchanges' data streams. It would also establish its own charges for its creation and provision of a consolidated feed under competitive conditions, just as data feed providers charge for the services they offer today. Thus, we answer this question from the perspective of terms that the NYSE is likely to establish after withdrawal.

[12] Rules 11Ac1-5 and 11Ac1-6. The question of whether to continue to require vendors and broker-dealers to provide consolidated data displays to all customers (rather than requiring them only to *offer* consolidated displays) deserves careful consideration by the Committee. However, the competing consolidators model works with either approach.

Terms other than fees – Today, the market data consortia disseminate data under three sets of contracts.[13] Under the competing consolidators model, both CTA/CQ and the NYSE could continue to establish terms and conditions through contracts.[14] They simply would not do so jointly.

Thus, CTA/CQ and the NYSE could separately enter into a contract with each consolidator, other data feed provider, vendor and professional subscriber.[15] Each contract would establish terms and conditions that are fair and reasonable and not unreasonably discriminatory.[16] Contracts with competing consolidators and self-consolidating vendors might include technical specifications.

Fees – As noted above, today, the nine exchanges establish fees jointly though a multi-layered process that involves vetting fee proposals with customers and industry groups, approval by each exchange's constituent finance committee or board, approval by CTA/CQ, and SEC review (including an opportunity for public comments). Under the competing consolidators model, except for the consortium-approval step, the process would be the same for the NYSE. Thus, the NYSE would establish its fees for NYSE-only data in the same way as it does today as to fees for listing, trading, regulatory and other services. Each fee would be subject to SEC review under the fair-and-reasonable and not-unreasonably-discriminatory standards noted above and the fee-filing requirements of Rule 11Aa3-2. The NYSE would bill its customers and collect amounts due.

Should market information be made available in a standardized format? If so, what should that format be? How will investors be assured of receiving accurate, real-time consolidated information under the competing consolidators model?

While today's technology permits multiple entities to receive simultaneously multiple streams of data and to create consolidated outputs that sequence prices and quotes in the same order, a

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[13] The three sets consist of one set under the CTA and CQ Plans, one set under the OPRA Plan and one set under the OTC/UTP Plan. Each set includes forms of agreement between each market and the consolidator, between the exchanges and vendors, and between the exchanges and professional subscribers. It also includes a form of nonprofessional subscriber agreement which, under the CTA/CQ Plans, runs between the subscriber and the vendor acting on behalf of the nine exchanges. The NYSE expects to continue this approach as to NYSE-only data.

[14] Under the competing consolidators model, the NYSE would have to receive SEC approval of its own transaction reporting/national market system plan. (See Rules 11Aa3-1 and 11Aa3-2.)

[15] Under the extended competing consolidators model, the resulting change from joint contracts to individual exchange contracts could theoretically result in an increase from today's three sets to nine (11, taking into account the NASD and the International Securities Exchange, which is the sole options exchange that is not also a CTA/CQ Plan participant). However, if the industry's experience regarding the high level of conformity among the exchanges' rule books is predictive, those three sets would serve as models for all the exchanges, and the regional exchanges would tend to follow subsequent modifications to the three sets that the primary exchanges make.

[16] See 1934 Act sections 11A(c)(1)(C) and (D).

multi-consolidator environment will introduce at the consolidation level four types of risk that are present today among data feed providers, vendors and other recipients.

- **Different Consolidator Operating Environments –** Hardware, software and line differences could cause differences in the ways consolidators process the CTA/CQ and NYSE outputs, which could lead to sequencing differences.

- **Validation** – Different validation tolerances would result in sequencing differences.

- **Capacity Considerations** – A particular consolidator might have insufficient capacity.

- **Protocols/Data Formats** – Consolidators would have to manage any differences between the CTA/CQ and NYSE in line protocols and data formats.

Today, the CTA/CQ Plans resolve many of these issues, and it would seem likely that those resolutions would carry forward without any intervention.[17] In addition, because the four types of risk are present today among data feed providers, vendors and other recipients, the industry is experienced in managing those risks. Moreover, continuing differences among competing consolidators in these risk areas would result in differences in service levels; one would expect these differences to self-correct under the discipline of market forces. However, to the extent that intervention is necessary,[18] it could be effected through standards-setting under the auspices of a trade group, through contractual undertakings and, if necessary, through direct SEC regulation of non-exclusive securities information processors ("SIPs").[19]

Why is the competing consolidators model preferable to the existing consortium model?

As noted above, our decision to withdraw from the CTA/CQ Plans is not based on any view that CTA/CQ has fallen short in delivering a high-quality dissemination service ubiquitously, inexpensively and reliably. Rather, it is based on the view that the "cure" to the consortium model that the SEC concept release and the options antitrust settlements prescribe is worse than the "illness" its critics perceive. Thus, we answer this question from that perspective.

Costs - The costs implied by the competitive model appear relatively small. As noted above, the joint costs of the collection, consolidation and dissemination functions are modest relative to the

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[17] If the NYSE were the only exchange to withdraw from the CTA/CQ Plan, uniform standards would almost certainly prevail so long as SIAC remained the consortium processor.

[18] For example, data feed providers currently manage protocol and data format differences in receiving feeds from the several data consortia, from the several domestic futures exchanges and from scores of exchanges around the world. On the other hand, we think that the issue of validation differences would almost certainly have to be addressed through uniform standards.

[19] The SEC has the authority to regulate non-exclusive SIPs under 1934 Act section 11A(c). It uses this authority to require consolidated displays. (See Rule 11Ac1-2.)

overall costs of producing and disseminating market data, and it appears that the unbundling of consortium costs may not raise them at all. Indirect costs could arise from failing to effectively manage the loss of today's "one-stop shopping" at a single consolidator that has a track record of high quality and cost-effective service and that acts as a neutral leader in the arena of setting standards and coordinating industry activity. But, as noted above, market forces and, if necessary, intervention in the area of standards can minimize this risk.

Benefits – In contrast, the benefits appear substantial. As described above, the competing consolidators model provides a data dissemination process that, operationally, is at least as good as that which exists today. In one stroke, the model ends joint pricing, and thereby the inter-exchange subsidies, cross-consortia fee distortions and other market distortions that currently exist.[20] Extended, it solves the problem in the OTC/UTP consortium resulting from the undifferentiated internal/inter-market systems of the NASDAQ Exchange[21] and the operational dysfunction now plaguing all the consortia.[22] The extended model also achieves the capacity independence among the exchanges sought by the Antitrust Division and the SEC.

Affirmative benefits include that the NYSE would compete with the other eight exchanges in the market data arena, just as its competes today with the other eight exchanges individually in attracting listings and liquidity. Similarly, data feed providers would compete as to consolidation services, just as they do today as to other services. The general benefits from competition in any industry are well understood, and need not be repeated here.[23]

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[20] SEC Market Data Concept Release, p. 34; NYSE Concept Release Response, pp. 3, 20-21 & 37. In brief, the joint activity under the plans distorts pricing and market efficiency because it creates (1) a revenue sharing scheme that ignores the value of each market's data (i.e., it creates inter-exchange subsidies) (see pp. 3, 20 and 21 of the response); (2) disincentives to quote competition (see pp. 20-21 of the response); and (3) cross-plan fee distortions (i.e., Network A receives 23 cents per message; Network B, $1.69) (see p. 37 of the response).

[21] See generally Letter dated October 17, 2000, from Robert G. Britz, Group Executive Vice President, New York Stock Exchange, to Richard G. Ketchum, President and Chief Operating Officer, NASDAQ Stock Market (the "October Letter to NASDAQ"). We have attached a copy of the October letter, which included the NYSE Concept Release Response as an exhibit, as Attachment A to this letter.

[22] October Letter to NASDAQ, p. 2 & n. 6; NYSE Concept Release Response, p. 21 & n. 37.

[23] Indeed, it seems to us that the consortium model can no longer be sustained as a regulatory matter. A core principle of the 1934 Act is that exchanges may not act in a way that imposes any burden on competition not necessary or appropriate in furtherance of the purposes of the 1934 Act. (See, e.g., 1934 Act section 6(b)(8).) In the face of the workable, pro-competitive alternative that today's technology makes possible, it is not clear to us how those who might espouse continuing today's consortium model could demonstrate that the burdens on competition imposed by the consortium model continue to be "necessary or appropriate". Thus, when subjected to the criteria of the 1934 Act, the question that you pose must be reformulated as, "What benefits of the consortium model over the competing consolidators model justify the burdens on competition created by the consortium model?"

I hope our description of how a model involving competition among multiple, non-exclusive consolidators might work, as well as our identification of some of its costs and benefits, proves useful. I look forward to discussing our proposal with you and the other Committee members at our meeting on December 14.

Sincerely yours,

Robert G. Britz

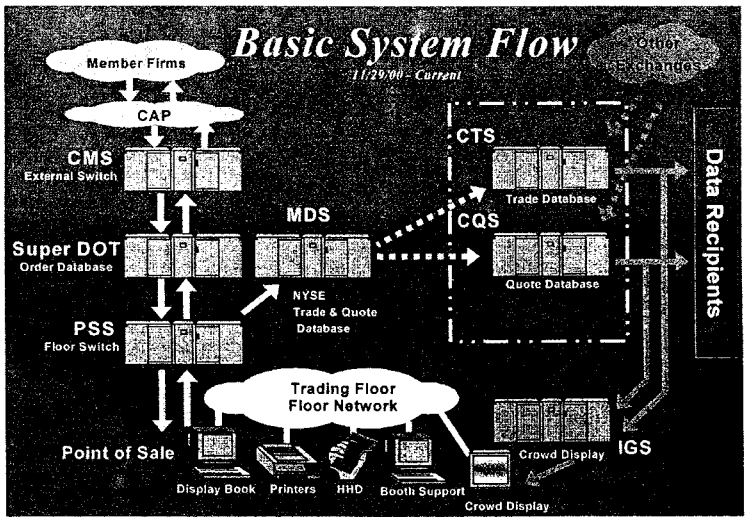
cc: Annette Nazareth
Members of the SEC Advisory Committee on Market Information

Appendix A

This Appendix A contains two flow charts. The first (Basic Systems Flow – Current) shows the current routing and processing steps of an order sent by a member firm to NYSE from the moment NYSE receives it to its distribution to data recipients and the attendant flow of market information that emanates from such orders. The second chart (Basic System Flow – Competing Consolidator) illustrates the modest changes that would occur in the routing of market information under the competing consolidator model.

Basic System Flow – Current ***(See chart below)***

Beginning at the upper left-hand corner, member firms send orders to NYSE via the CAP network into CMS. CMS provides reliable communications between member firms and NYSE host systems operated by SIAC. CMS supports over 450 circuits, handling a variety of communications speeds and protocols. CMS receives, edits and validates orders and formats associated reports back to the member firms. CMS also handles queuing, flow control and priority routing. From CMS, the order flows to SuperDOT, where it receives a reference number and a "safe store" record created and placed in the database of record. Based on member firm parameters, SuperDOT then routes the order via PSS to its appropriate destination on the trading floor (which could be the specialist's display book ("DB"), a member's booth, a handheld device or the like).



Market orders received by DB are generally executed within a matter of seconds. When a trade execution occurs, DB sends a report of it back to the member firm and reports the

details of the trade to MDS via PSS along with an update of the quotation. Limit orders entered into DB have the potential to generate a new quotation, which DB would also generate and send to MDS via PSS. MDS validates the trade and/or quote, captures it in a database and passes it on to CTS or CQS, as appropriate.

CTS and CQS receive trades and quotes from NYSE and from each of the eight other U.S. exchanges. These trades and quotes are validated, captured in databases, consolidated into two separate data streams (i.e., one for trade reports and one for quotes), and disseminated to data recipients via high speed networks.

IGS is a NYSE system that receives the CTS and CQS consolidated data streams just like any other data recipient. It then provides the data streams to NYSE applications such as crowd displays and booth support.

Basic System Flow – Competing Consolidator Model (See chart below)

The left side of this chart is the same as previous chart. The channels through which member firms send orders to NYSE, and the several processing steps that are performed by NYSE host systems in handling those orders, remain unchanged in the competing consolidator model. Similarly, the trade report and quote generation process also remains the same.

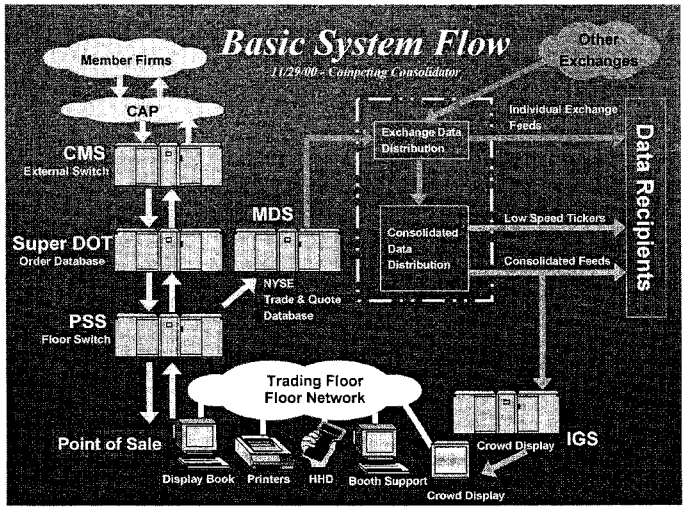
Under the competing consolidator model, NYSE would no longer make its trade and quote information available solely to one exclusive consolidator, but to as many self-consolidating data recipients and/or competing consolidators as might wish to receive it. Under the current model, data recipients have no choice but to receive a consolidated stream of data. Under the competing consolidator model they could choose to receive individual streams of data from one or more exchanges and to consolidate those data streams themselves or they could choose to receive a consolidated stream of data from any competing consolidator.

NYSE anticipates that it would continue to support SIAC providing a consolidation facility, but not an exclusive processor facility. NYSE, as well as the other exchanges, will have a continuing need to receive and display data from all markets in order to fulfill their regulatory obligations. The chart below illustrates the making available of both unconsolidated and consolidated streams of data.

The box on the chart entitled "Exchange Data Distribution" depicts the output of unconsolidated streams of data received from any other exchange that wishes to distribute its data on an unconsolidated basis. It also reflects the fact that, even if an exchange chooses to utilize another facility to distribute its data, NYSE would, of necessity, make appropriate arrangements with all exchanges to receive their data and to consolidate such data for its own purposes.

The box on the chart entitled "Consolidated Data Distribution" reflects SIAC's continued performance of the consolidation function on a nonexclusive basis for NYSE and for the

benefit of any other data recipient that might wish to receive a consolidated feed from SIAC. The functions depicted in both of these boxes could potentially be duplicated by



a number of other organizations. Each would receive trades and quotes from NYSE and from each of the other exchanges, and each would provide to data recipients (1) separate feeds consisting of each exchange's data (e.g., a NYSE-only feed), (2) a consolidated stream of last sale prices and/or (3) a consolidated stream of quotes.

New York Stock Exchange, Inc.

Comments to
Securities and Exchange Commission Concept Release on
"Regulation of Market Information Fees and Revenues"
(Release No. 34=42208; File No. S7-28-99)

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James E. Buck
Senior Vice President
and Secretary

NYSE
New York
Stock Exchange, Inc.

April 10, 2000

Jonathan G. Katz
Secretary
Securities and Exchange Commission
450 Fifth Street, NW
Washington, D.C. 20549-0609

Re: Market Data Concept Release (December 9, 1999), File S7-28-99

Dear Mr. Katz:

The Exchange wishes to thank the Commission for providing a forum for a serious discussion of a critical subject, and for providing us this opportunity to participate. Market data is our core product. When two investors trade, the *execution* is important to just them. But the *price* of the trade is important to millions of others around the world - for deciding their next market action, for pricing their portfolios, for valuing their stock options and for providing a report card on how well management is discharging its responsibilities to them as shareholders.

We are also eager to comment because we believe that the Concept Release raises issues well beyond market data - issues ranging from the basic governance, funding and operational stability of our securities markets to the neutrality of a self-regulatory organization ("SRO") toward different broker-dealer business models and the equitable allocation of costs versus "free-riding".

Below, we attempt to comment comprehensively on the substantive issues raised in the Release. However, we believe that it is equally important to place this discussion in its proper context.

The issue is not, nor has it ever been, about investors' access to real-time data for NYSE-listed issues. Professional investors have access to an endless supply of such data at a cost that, in real terms, has consistently and dramatically declined over the past 25 years. Indeed, we are not aware of any issue having been raised by users with regard to professional display unit fees for data made available by the markets that

trade NYSE-listed securities ("Network A").

Similarly, individual investors, and the general public for that matter, have access to unlimited real time data through a wide variety of delivery systems - PC's, telephone, television, PDA's, pagers, automated teller machines, etc. Market data is available in the home and in public places - libraries, schools, airports, restaurants, train stations, shopping malls and literally on the street. In contrast to commentators who imply that investors are struggling for access to real-time data, in truth it is hard to avoid it. Simply stated, the data is pervasive and, from many sources, absolutely FREE.

So if this exercise is not about investors' access to market data, what is it about?

Well, it's about competitive positioning by brokers. It's about a few on-line brokers trying to gain competitive advantage by shifting to their competitors the cost of the markets' operations and infrastructure investments. It's about a broker-dealer business model that depends on access to (1) primary market-discovered prices on which to base internalized executions, (2) a deep pool of liquidity within which to lay-off proprietary positions, and (3) a network and order processing complex that provides unrivaled capacity and reliability - and that seeks to pay little or nothing for those services. Mostly, it's about trying to use the government to gain competitive advantage.

But there is another perspective, that of the markets that produce and distribute the data. From that perspective, the issues raised in the Concept Release are about governance - about the efficacy of self-determination within a SRO, where all constituents are represented and where majority rules. And the issues are about fair allocation of costs - about all users paying their fair share and not allowing some to "free-ride" while others pay more than they should. And the issues are about funding technical infrastructure investments needed to receive, process and safe-store the orders, quotations and trade reports that give rise to the data in the first place. Because under-investing in the capacity, redundancy and reliability of order processing systems is not an option for the New York Stock Exchange.

Today, the task of fairly allocating the costs of operating the markets among market constituents resides with the constituent boards of the SROs, subject to approval by the Commission after public comment. Cost allocation occurs pursuant to constituent governance procedures that the Securities Exchange Act of 1934 ("1934 Act") mandates, and that the Commission has approved and continually monitors. The Concept Release proposes to subordinate today's cost allocation by consensus to utility rate-making, and to overlay existing market governance with a new, supra-SRO bureaucracy.

In this letter and its appendices, we show how inserting the government directly into the fair allocation task will divert market resources, stifle productivity and innovation, increase industry costs, and significantly burden the Commission staff. In fact, in our opinion the proposal is simply unworkable. We also show how, in vitiating our constituent-driven process, utility rate-making will restrike the balance created by negotiation, compromise and consensus among our diverse constituents. Such a governmental intervention would thereby reallocate costs, produce "winners" and "losers", and favor one business model over another, all without providing measurable benefit to the investing public.

It is clear from the Concept Release that the Commission is concerned that the decision made in the 1970s to consolidate and disseminate market data pursuant to joint SRO plans produces revenue allocations to the regional exchanges and the National Association of Securities Dealers ("NASD") that do not relate either to the costs of running the regional and third markets or to the value of the derivative prices those markets produce.[1] The Exchange has long accepted that inefficiency as a price of achieving the statutory mandate of a national market system.

Now, the Commission seems committed to addressing the negative consequences of that decision. However, rather than create a new, supra-SRO bureaucracy coupled with utility rate-making, we propose that we eliminate the source of the problems -- the joint dissemination arrangement itself.

To catalyze a pro-competitive solution that takes advantage of today's technology, our Board of Directors has authorized our withdrawal from the CTA and CQ Plans.

ORGANIZATION OF SUBMISSION

To make this submission manageable for the Commission staff, this cover letter serves as an executive summary to a series of detailed appendices.[2] It is divided into three parts.

In Part 1, "Alternative Cost Allocation Models and Their Statutory Basis", we challenge the notion that the Commission staff has somehow been derelict for 25 years in failing to engage in rate-making. We maintain instead that the Commission has approached market data prices precisely as Congress contemplated, and in a manner which other regulators in other industries have come to recognize as vastly superior to traditional rate-making regulation. In Part 1 we also discuss the rate-making model presented by the Commission in the Concept Release, and describe the market distortions, costs and other pernicious effects it would produce, and the government micro-management of business processes it would entail.

Part 2, "The Track Record of the NYSE Board", begins by summarizing the many accomplishments under the Commission's 25-year stewardship of market data and clarifying some of the misconceptions that have arisen about the Network A fee structure. Then we discuss the extraordinary inclusiveness of the governance arrangements that prevail at the SROs today. We show that the constituent boards of the markets, through negotiation, compromise and consensus, demonstrate the verity of Winston Churchill's oft-quoted observation that "[D]emocracy is the worst form of Government except all those other forms that have been tried from time to time."[3] We also take a close look at a cost allocation decision that the Concept Release highlights - telephones and registered representatives ("RRs") versus PCs and the Internet - and show why none of the proposed alternative cost allocation models could reach a fairer result.

Finally, in Part 3, "Consolidation Technology, Free Markets and Constituent Boards", we review the inefficiencies which the Commission has identified as inherent in the current SRO joint ventures. We then argue that the solution lies in dissolving the ventures, harnessing technology and freeing the markets to compete in the market data arena as they do in all others. We further argue that market forces and the markets' constituent boards, under Commission oversight, would assure the fair allocation of market costs.

PART 1: ALTERNATIVE COST ALLOCATION MODELS AND THEIR STATUTORY BASIS

A. Congress Did Not Authorize a Market Data Rate-Making Process

As the Concept Release recognizes, Congress was not writing on a clean slate when it enacted the Securities Act Amendments of 1975 (the "1975 Amendments")[4]. The Commission had already approved the consolidated transaction plan filed by the

Exchange and the other markets during the previous year pursuant to newly-adopted Rule 17a-15 under the 1934 Act. That rule expressly provided that the SROs could impose "reasonable, uniform charges" for the

distribution of market data. The CTA Plan extended to the consolidated networks the fee structures that had previously been in place for the ticker systems of the NYSE and the American Stock Exchange ("Amex").[5]

Because market data revenues were an established source of SRO funding at the time the 1975 Amendments were enacted, one must assume that any congressional intent to eliminate them, or to subject them to some type of cost-based justification process, would have been expressly set forth in the statute or in the accompanying legislative history. There is no evidence, however, that Congress intended such a result.

As set forth in the memorandum entitled "Legislative History and Subsequent Administration of Securities and Exchange Act Section 11A" (prepared by Debevoise & Plimpton and attached as **Appendix B**), the legislative history makes clear that the relevant provisions of Section 11A were designed to ensure that the Commission had clear statutory authority to address the types of problems that had delayed the development of a consolidated transaction reporting system over the previous three years. The Commission had been forced to referee disputes among the markets regarding many aspects of the consolidated reporting system, and the legislative history repeatedly cites the subjects of these disputes as examples of the types of problems that the rule-making authority provided to the Commission was designed to address. The fees charged for market data were not among the disputed items, and there is no indication that Congress sought to establish a standard more restrictive than the "reasonable, uniform charges" standard already in place under existing Exchange Act Rule 17a-15.

The Concept Release suggests that a congressional intent to subject market data fees to some type of cost-based justification process may be inferred from the fact that Congress referred to an exclusive processor of securities information as being "in effect, a public utility." It is clear from the context of the discussion in the legislative history, however, that this reference was in no way made for the purpose of explaining why market data fees need to be subjected to utility-type rate making proceedings: the reference was emphasizing the importance of ensuring that an exclusive processor functions in a manner that is "absolutely neutral" with respect to competing markets and firms. In short, Congress was concerned, not about the size of market data fees as such, but about the possibility that an exclusive processor might be dominated by a particular exchange and engage in practices that placed other markets or firms at a competitive disadvantage.

The conclusion that Congress was primarily concerned about non-price restrictions that would be anti-competitive or discriminatory, and did not intend to subject market data to a rate-making regime, is buttressed by the fact that Congress did mandate a cost-based justification process in another provision of the same legislation. In the context of eliminating fixed commission rates, Congress provided in Section 6(e)(1)(B) of the Exchange Act that the Commission could approve a schedule of fixed commission rates only if it made a finding that the rates "are reasonable in relation to the costs of providing the service for which such fees are charged." This illustrates that Congress knew how to write legislation that clearly requires a cost-based justification process when it intended to do so.

The Commission has administered the provisions of Section 11A for 25 years without subjecting market data fees to any sort of cost-justification process, except in the situation where an exclusive processor of securities information also acts as a vendor of that information.[6] The legislative history provides no basis for the Commission to abandon this long-standing policy and take a fundamentally different approach to the review of market data.

B. Distortions, Costs and Pernicious Effects of Government Utility Rate-Making

We are also convinced that the cost-based approach suggested by the Commission simply will not work. It would inappropriately burden both the government and the industry, stifle competition and innovation, and in

the end, *raise* costs and, potentially, fees.

To assist us in analyzing the effects of the Commission's approach, we retained economic and regulatory experts at the consulting firm of PHB Hagler Bailly, Inc. ("PHB"). They have prepared two extensive analyses which support in depth our concerns about the fairness and viability of the cost-based approach. To enable the Commission and its staff to study these analyses in detail, we have attached them in their entirety as **Appendix C**.[7] For ease of reference, PHB has highlighted its findings in a cover letter, which we also include in Appendix C.[8]

The economists and rate-regulation experts at PHB make several points that we consider essential to any discussion of how to approach governmental involvement in the pricing of market data. To start with, they observe that the Commission has thoughtfully applied the mandate of the 1975 Amendments in overseeing the administration of market data production and distribution, and has beneficially regulated market data in a way that is currently the goal of many other regulatory bodies in other industries. In fact, PHB points out, other regulated industries *are actually moving away from cost-based rate-making.* The PHB experts are surprised to observe the Commission proposing to move *against the trend,*[9] and note that this can only be regarded as retrogressive.[10]

They see the Commission's proposal for "flexible cost-based" regulation as conceptually flawed and practically impossible. Simply put, they say there is no "short cut" like "flexible costing". Any cost-based regulatory scheme must be grounded on a thorough, rigorous analysis of the costs of all the markets supplying market data. Any such analysis requires the creation of a uniform system of accounts for deciding what to include and exclude. If some sort of "flexibility" is then introduced, it will only breed endless disputes as parties bicker over rate-making decisions based on a vague set of standards.

The PHB experts also observe that it is impossible to regulate market data prices in isolation from other prices charged by markets for other services. Market data and transaction execution are what the economists refer to as "joint products", linked in a way that pricing of one inevitably affects pricing of the other. If rate regulation were to reduce the revenues that could be realized from market data fees, then other fees - transaction fees or, in the case of the primary markets, listing fees - would have to be increased to maintain the same infrastructure and level of services. However, since the three types of fees fall differently on broker-dealers following different business models and differently on broker-dealers, institutional investors and listed companies, the result is a reallocation of market costs based, not on competition and constituent governance, but coming as a side-effect of governmental intervention.

In addition, PHB is able to speak with authority about the likely administrative burdens that cost-based regulation will place on all parties, especially the Commission itself. Extrapolating from what they observe in other industries, in PHB's expert opinion, the administrative burden would be "enormous". They note the large number of participants to be regulated. They describe the extraordinary amounts of information, accounts and reports that will have to be standardized and analyzed to make determinations that will stand the scrutiny and challenges to which rate-making decisions are subject.[11] And even when the preliminary work is diligently done, litigation is inevitable, if only to delay a decision unfavorable to one party or another. PHB also notes that rate regulation must allow the regulated entities to recover the administrative costs of regulation, adding to the costs that must be reflected in the rates charged for market data.

Cost-based rate regulation introduces other inefficiencies as well, and these inefficiencies equal additional cost. PHB observes from experience that cost-based regulation encourages cost-padding, and provides no incentive to reduce costs through operating or administrative efficiencies. Again, since the rates being

regulated must themselves provide for recovery of related costs, this kind of regulation of market data prices will quite possibly lead to increases in those prices. Without a strong need to move to this form of regulation, such a result cannot be justified.

A very important point that PHB brings out in its analysis is that rate regulation is never aimed solely at minimizing rates to consumers, since very low rates may affect the attractiveness of the business to competitors and potential competitors, or the level of service provided. So the regulator must determine what is a "fair" rate of return that provides a suitable incentive for service providers while protecting consumers as well. Of course, this is what market competition usually does, and PHB reminds us that rate regulation implies a belief that market forces cannot be relied upon. As is clear from our comments, we strongly believe that constituent boards and customer control have in fact provided the discipline that any government would expect and desire in the area of market data services and fees, and that such inefficiencies as do exist arise from the decision to impose a joint venture arrangement for market data dissemination.

PHB also tells us that modern regulatory theory realizes that a more effective regulatory model is one that tries to mimic competition. This is the theory of "Ramsey pricing", which accounts for consumer welfare while meeting the need to keep the supplier viable. Most significantly, Ramsey prices cannot be deduced from cost data alone. In fact, prices for any one service are arrived at by assessing the elasticity of demand for that service, not by a simple accounting allocation of cost. The service with less elastic demand - market data, in our case - can be expected to bear a higher price compared with a service with more elastic demand - such as execution services. (See Appendix C-2.)

PHB's discussion of this concept is significant in two ways. First, it shows, contrary to the presumptions in the Concept Release and the arguments of certain commentators, that economic theory about cost-based recovery would shift the recovery of more of the market costs *to* market data fees and *away from* transaction and listing fees. Second, it prompts the question, "Why should government rate regulation, rather than constituent self-determination, dictate a shift among constituents as to how they bear the costs of the markets?"

In summary, we believe, and our experts confirm, that the cost-based approach suggested in the Release will inevitably stifle competition and innovation, and entangle both the industry and the Commission in time-consuming, expensive and ultimately fruitless proceedings and data analysis. PHB demonstrates that even in industries historically subject to utility regulation, cost-based rate making has been discredited. PHB also shows that market data dissemination is far from an ordinary utility function, and that cost-based regulation is particularly inappropriate here.

The markets whose data have been consolidated through CTA are fierce competitors. Cost-based rate regulation has consistently been seen in other industries to lead to poor cost control at best and, more often, to outright waste and mismanagement. The incentives on competitors to wring easy profits from a cost-regulated segment will be magnetic, and represent a real danger that will demand extensive government involvement. In contrast to the dramatic decline in market data costs over the past quarter century, under cost-based regulation, it is quite possible we would experience over time frequent rate increases based on escalating expense levels.

PHB includes a quote that we think captures the overall essence:

> Regulation, at best, is a pallid substitute for competition. It cannot prescribe quality, force efficiency, or require innovation . . . . Regulation fails to encourage performance in the public interest by offering rewards and penalties. Competition offers both."[12]

PART 2: THE TRACK RECORD OF THE NYSE BOARD

The cost-benefit analysis necessary to justify acceptance of the market distortions, costs and other pernicious effects of the "pallid substitute" would need to show that the pro-competitive alternatives had failed to realize the public policy goals of the 1934 Act. In fact, the record of constituent self-determination is one of exponentially increasing data access accompanied by consistent and dramatic declines in market data fees. In this Part 2, we look at the track record.[13]

A. Availability of Network A Data in the Marketplace

In 1975, Congress declared that market data would lie at the heart of the national market system. For the last 25 years, the Network A markets, under the Commission's stewardship, have sought to produce high-quality market data and to disseminate that data widely and on terms that are not unreasonably discriminatory and that are fair and reasonable.

How have they fared?

As the year 2000 began,

- 100 million people had on-line access to free real-time Network A data on public web sites;
- 70 million cable television subscribers had free access on their television screens;
- 12 million nonprofessional investor accounts had on-line access from their brokers, most free of charge;
- Industry professionals had access on 420,000 display devices located in offices around the globe; and
- 350,000 nonprofessional subscribers had signed up for unlimited real-time services with vendors and broker-dealers.

Are fees deterring widespread access to Network A data (as the Concept Release asks)? This record speaks for itself. As the Commission noted on the eve of the present controversy in the context of approving fees for the redistribution of options market data:

> Competition among technology and information providers continues to thrive. Over the past few years, individual investors have enjoyed unprecedented access to market data through varied media, including CNN, CNBC, satellite services, on-line computer services, the World Wide Web, and the Internet.[14]

Today, an investor has access to real-time Network A data by means of his or her PC, hand-held computer, telephone audio voice response, cellular phone, pager device, automated teller machine and public ticker display. They can see it while dining in a restaurant, while passing through Grand Central Station, while standing in Times Square, while shopping at a mall, while flying in a plane, or while watching television. In short, Network A has fashioned policies and practices that have released the Internet and cable television to democratize market data. As a result, real-time Network A data is ubiquitous, inexpensive to vendors and available to consumers for free.

In addition, system investments have created such redundancy and dependability that both the Consolidated Tape System ("CTS") and the Consolidated Quotation System ("CQS") have compiled uptime percentages that have remained above 99.9 percent ever since the systems commenced operations in the 1970's. And the markets have invested billions of dollars in technical infrastructure that enables last sale prices and quotations to be delivered to CTS and CQS for distribution to broker-dealers and vendors without queues regardless of increases in volume due to market volatility, decimalization or other changes.

As for Congress's goal of dissemination on terms that are not unreasonably discriminatory, Network A's policies and uniform contract terms assure that no one gets better terms of access than anyone else. Network A imposes the same market data fees on broker-dealers regardless of their SRO membership, and subjects all vendors, broker-dealers and investors to the same fee schedule, regardless of geographical location.

Network A's fee structure does differentiate among different classes of data recipients and provides volume discounts and an enterprise cap. However, in each instance, the markets' diverse constituents and the Network A participants' constituency-laden boards of directors, indicated that they viewed the disparities in Network A fees as reasonable and appropriate, as has the Commission.

As for distribution on "fair and reasonable" terms, the numbers make the case for the fairness and reasonableness of Network A fees. Since 1985, the securities industry's cost per transaction for each Network A real-time trade or quote message has shrunk from $1.00 to 23 cents. Taking into account inflation, all classes of fees have been consistently and dramatically reduced over the last 25 years. The repeated explicit and implicit price reductions have had the desired effect - extraordinary growth in market data usage. Yet, even with that growth, *the revenues from those fees fund the same portion of the Exchange's operations (14-17 percent) as they did a quarter of a century ago.*

Above all, Network A fees are "fair and reasonable" because the process by which the fees are determined is fair and reasonable. Network A fees are the product of the consensus building, compromise and negotiation process described below. Constituent boards have approved them all. The Commission, after subjecting each fee or fee change to public comment, has approved it or declined to abrogate. This process ensures that it is the consensus view, rather than the "outlier", that prevails.

Constituent self-determination has succeeded in fulfilling Congress's market data objectives by coupling advancing technology with innovation and adaptation. Application of new technology to the auction process has successfully accommodated massive increases in capacity demands, while making high-quality data available on a very reliable basis to retail investors at zero cost.

The heart of the national market system never misses a beat.

B. Constituent Governance

Market data dissemination is governed today by the industry and the investing public, operating through the representative boards of the SROs. The checks and balances in the current system insure that any latent market power is not exercised. It would upset the balance of this system and introduce significant inefficiencies if the Commission were to impose an additional layer of governance, or were to insist that market data fees should be earmarked for particular purposes, such as market regulation, to the exclusion of others.

Decisions by markets regarding the pricing of market data (indeed, all pricing decisions for all services)

involve input and controls from a wide variety of industry participants and investors through the constituent boards of the various markets. These boards include CEOs of member firms and institutions, and leaders drawn from the general public. In the case of the primary listing markets, they include listed company CEOs as well.

For example, the NYSE board is carefully balanced to include both member and non-industry representatives, and among the members, to include representatives from various business segments, floor and upstairs, institutional and retail, regional and national, discount and full service. This extraordinary body comprises some of the most knowledgeable and influential people in the securities industry and, indeed, in the world of business as a whole.

As is commonly the case, the NYSE Board acts by majority vote. However, as is also common in business today, there is a real emphasis on achieving consensus, so that any serious concern or objection from a constituent will prompt an effort to satisfy the concern through negotiation and compromise before taking the contemplated action. One dissatisfied customer may not be able to force a change, but when a critical mass of our constituents voice a point of view, the Exchange's view is changed. It is in this way that any latent monopoly pricing power or power to discriminate among users with respect to market data is in fact controlled, directly or indirectly, by representatives of the very customers who use and pay for that data.[15]

CTA today is a forum in which markets can discuss issues that exist among them; it is not where pricing decisions are made. Those decisions are made by the boards of the participant SROs, where the customers and the representatives of the public reach consensus on pricing and other terms.[16] With respect to Network A, the NYSE will typically take the lead on pricing proposals, vetting new proposals not only with the other participants, but also with various users, and with trade and industry groups. This dialogue often results in modifications which improve or reevaluate the original concept. Proposals are then taken before the NYSE Board and the boards of the other CTA participants for approval.

And, of course, pricing and other rule changes are subject to the approval process at the Commission after public comment. In addition, both SRO and Commission rules provide procedures for broker-dealer members (in the case of SROs) and any person who believes his or her access has been limited (in the case of the Commission) to seek redress of their grievances.

Superimposing yet another layer of governance would stifle self-determination, not enhance it. This is especially true if that layer is added at a level where, by definition, the governors are removed from an immediate and full understanding of market costs and expenses, and are instead myopically focused on minimizing market data fees. Moreover, it seems inevitable that broker-dealer and institutional investor representatives on such a special-function body would be drawn from the ranks of their administrative and technical employees. This kind of representative cannot be expected to have the "big picture" view found in the chief executives who serve on the boards of the markets and who bring that broader perspective to the board deliberations on various fees, including market data fees. It would make no sense to permit a less qualified group to effectively strip cost allocation decisions from the user chief executives found on the boards of the NYSE and the other markets.

C. Fair Allocation of Costs: Nobody Does It Better

Has our constituent-driven process for allocating costs done so fairly? From some media accounts over the past three years, one would think that the process foundered on the issue of cost allocation between on-line brokers and full-service brokers. But the facts tell a different story.[17]

The on-line brokers believe that it is the obligation of a for-profit company to "exploit every economic advantage".[18] Therein lies the truth about the recent history of this allocation process.

It is the story of the attempt by one category of broker-dealer to foist the costs of operating the markets onto other categories of broker-dealers or onto listed companies. The on-line brokers seek to escape the market data fees that apply to their business model, to confine market data fees to the recovery of a narrow band of marginal costs, or to vaporize market data fees altogether. Until recently, the main thrust of this campaign was against our allocation of costs between those broker-dealers that provide market data to customers during telephone calls with their RRs, and those that provide market data to customers on-line.

The on-line brokers' campaign began in 1997 with an attack on Network A's penny-per-quote filing. When, at the Commission's request, we re-channeled the penny-per-quote fee into a new pilot, the lobbyists for the on-line brokers carried the campaign to Capitol Hill, arguing that "The Data Belong to the People". Ostensibly seeking to protect consumers from charges of a few pennies per day, the lobbyists neglected to mention that no on-line customer pays for market data unless the broker chooses to pass through the markets' charges.[19]

When the campaign to nationalize market data bogged down on the Capitol steps, the on-line brokers opened a new front. "The subject Consolidated Tape Association/ Consolidated Quotation (CTA/CQ) plans and the comparable fees imposed by NASD . . . are levied only on brokerage customers electronically accessing market information. Such fees are not levied on investors that receive quotation information verbally from their brokers over a telephone."[20] This time, they had to retreat outright, conceding that, when a firm's RR gives a customer a quote over the phone, it is conceptually the same as when the firm gives the same quote to the same customer on-line.[21]

With their discovery that market data is free to consumers and that broker-dealers are paying for both the telephone/RR channel and the on-line channel, the on-line brokers had to open a third front. Now, they assert that "triple billing" and "multiple channel penalties" are discouraging "innovation, efficiency and convenience of investor access."[22]

Are they?

We have charged separately for separate "channels" since the interrogation device augmented the ticker in 1960. It is just one of the many tools that NYSE's constituent board uses to fairly allocate its costs among constituents. Clearly, to the extent that two competing constituents pursue different business models that rely on different dissemination channels, we could not impose fees on one channel while leaving the other one free of fees, and still fairly allocate costs and avoid unreasonable discrimination. If one customer receives a certain amount of data through *three* channels, and a second receives the *same* amount though *one* channel, how is it "triple billing" if we charge the provider of data to the first customer the same amount as we charge the provider to the second customer?

Moreover, over time, vendors and broker-dealers shift channels - even if we have been successful in setting our fees neutrally between the two. For example, over the past 30 years, the interrogation device channel has largely supplanted the ticker channel in the professional category.[23] That channel shift was attributable to the inherent limitations in ticker technology: ticker throughput is governed by the speed at which a human eye can perceive moving characters.

Clearly, if we are to recover a fair share of our costs through market data revenue, we must be able to charge for the supplanting channel. Fortunately for fair allocation, during the 1970's, no one was able to convince the Commission that charging for the interrogation device channel was in some way inimical to the public interest.

Today, a channel shift is going on within the non-professional category from the telephone/RR channel to the on-line channel. There appear to be two principal reasons. The first is similar to the one that led to the marginalization of the ticker channel: today's individual investor wants the same analytical abilities as the professional; plummeting technology and communication costs have brought those analytical tools within the reach of his or her wallet; and a stream of electronically-delivered dynamically-updated data is essential to that capability.

The second reason has no counterpart in the earlier channel shift: the brokerage firms are pushing their customers into the on-line channel because self-help by customers reduces RR payroll and other overhead.[24]

If achieving fair cost allocation and avoiding unreasonable discrimination requires extending fee liability to new channels, then the question becomes one of "how." If we were comparing "apples to apples" (as was implicit in the example above), then "1X times 3 channels = 3X times 1 channel", and one can apply the same price tag to each unit of data.

Unfortunately, in allocating costs between the two nonprofessional channels, we must compare "apples to oranges". In the "telephone/RR" model, a firm tasks an RR to work from a fee-liable interrogation device to telephonically provide a customer with a small, discrete number of quotes. In the on-line model, the firm arms the self-help customer with an array of information and analytic tools that allows the customer to access and manipulate large numbers of quotes. Thus, the quality, nature and use of the data are different.[25]

We approached this allocation task in several steps as experience educated us. In 1984, we established an "all-you-can-eat" device fee for non-professional subscribers at a fraction of the professional device fee. By the early 1990's, changing technology and business models were militating for alternative fee approaches.

We responded, first, by holding the professional device fees nominally constant and piloting three on-line fee alternatives: flat-rate, connect-time and per-quote. Second, when the per-quote alternative proved the best, we adopted it.[26] Third, as the use of the channel increased and, therefore, our revenue from the channel increased, we twice rebalanced against the telephone/RR channel by reducing the fees attributable to on-line receipt.[27] Fourth, we introduced quote-volume discounts and per-customer caps, providing to the on-line channel the same benefits of discounts as are available to the telephone/RR channel.[28] Fifth, we added an enterprise cap applicable to all channels, which ameliorates the issue for any firm that reaches it.[29]

We think the Exchange's constituent-driven process has done a good job of meeting the fair allocation challenge presented by the emergence of the on-line channel.[30] In particular, we avoided favoring one broker-dealer business model over another. We also expect that the growing homogenization of the brokerage industry in its use of on-line data dissemination will tend to moot the issue. Moreover, while we would gladly consider other approaches, we suspect that the array of channel fees, discounts and caps now in place position us with the tools necessary to easily re-balance the cost allocation between the telephone/RR channel and the on-line channel for a third time, should that again become necessary.

But, above all, we believe that no government rule-making bureaucracy or supra-SRO governing body, even

if it could have achieved neutrality and escaped co-option, could have done a better job.

PART 3: CONSOLIDATION TECHNOLOGY, FREE MARKETS AND CONSTITUENT BOARDS

After 25 years of data dissemination through SRO joint ventures, the Commission is right to ask whether changes in technology and in the competitive landscape ought to change who should allocate market costs among users, and how. The Concept Release proposes introducing a form of price controls by adding one or more levels of government or superimposing a supra-SRO bureaucracy.

We think just the opposite tack - dissolving the joint ventures - offers the best solution. Here, as in other areas of the economy, the best answer lies in unleashing market forces and relying on constituent self-determination. If we unbundle the data and dissolve CTA and the other joint ventures, we will free the markets to compete in the data arena - as they do in all others - by pricing and selling their product individually.[31] The very act of dissolving the joint ventures will give full reign to the markets' constituent boards to control market costs and to fairly allocate those costs among constituents within the Commission's framework of mandatory dissemination and mandatory consolidated display of the data.[32]

While there was a technological reason for forming an SRO joint venture to create a consolidated tape in the mid-1970s, technology has long since removed the systemic and economic barriers to consolidation either by each vendor or broker-dealer independently or by non-exclusive service bureaus performing the function at market rates. In the related context of his proposal for consolidated dissemination of limit orders, Chairman Levitt recognized this feasibility in his call for vendors and others to create consolidated displays of limit orders.[33] We see no reason why a market solution for consolidation that appears both workable and consistent with the goals of the 1934 Act for limit orders would not be equally workable and consistent for bid-asked quotations and last sale prices.[34]

A market solution coupled with constituent self-determination under Commission oversight addresses the Commission's concerns about undesirable effects of the current joint dissemination arrangement. For example, the Commission is concerned about whether the revenue received by the regional exchanges and the third market exceeds the value of their data.[35] We assume that market forces will readily address any value distortions inherent in the joint venture arrangement if the markets are freed to compete among themselves in separately pricing their market data. We have also seen in a variety of contexts the Commission's desire to increase quote competition. Intermarket competition in the market data arena will create incentives for more competitive quotations in order to create the value proposition necessary to make market data users willing to pay for the data.[36]

The Commission also expresses concern in the Concept Release about the lack of correspondence between the joint venture's revenue allocation and the costs of operating the regional exchanges and the third market. As noted above, this lack of correspondence arises because the plan fees are based upon the more extensive costs of the infrastructure of the Exchange and the other primary markets, but shared with the regional exchanges and the NASD according to a formula that is not correlated with the costs of the regional and third markets or the value of the derivative prices those markets produce. Subjecting each market separately to the test of competition would flush out any systemic inefficiencies built into market data pricing by the joint venture arrangement.

Shutting down the joint ventures would also moot a variety of other controversies that have been plaguing the markets and the Commission - none of which is unresolvable, but all of which place additional demands

on scarce Commission resources. For example, because the CTA Plan - drafted at a time when all exchanges had physical trading floors - provides a fee exemption for terminals on trading floors, the Commission is faced with an appeal by a floor-less exchange. Another participant filed a petition with the Commission last year regarding a dispute over whether a particular security was eligible for revenue sharing under the Plan. The options exchanges have been arguing with a new, floor-less entrant as to whether it should be able to directly provide its own last sale prices and quotations to its members. In addition, the options antitrust investigations and lawsuits have impaired the functioning of meetings of the joint ventures because businesspeople are afraid to talk to one another unless they have an antitrust lawyer on one side and a Commission staff member on the other.

The collateral effects extend to fundamental issues about the self-regulatory structure. The motivations of some of the ECNs to register as national securities exchanges include sharing in the joint venture revenue, forcing the Commission staff to devote considerable resources to help the ECNs meet the daunting statutory standards for registration. In turn, the prospect that the Commission would then have to regulate the ECNs directly contributes to the call for the creation of a monolithic SRO cleaved from the primary markets. And the question of the amounts that the new joint-venture entrants should reimburse the existing co-venturers has caused the Antitrust Division of the US Department of Justice to weigh in.[37]

These changes should also benefit the overall competitiveness of the US capital market. This Commission has led the way in recognizing how changes in technology and in the economy have enabled market solutions to replace the non-market solutions of the last generation. Examples include increasing non-industry participation on the boards of the NASD and Philadelphia Stock Exchange; opening the NASDAQ markets to competition from order-match systems by imposing the order handling rules; breaking open the single-exchange order-routing channels left behind by the options allocation plan; enhancing listing competition by removing shareholder approval requirements for delisting; proposing alternatives to exchange rules that address fragmentation and internalization by confining proprietary trading to exchanges; and decimalization. Ending the SRO joint ventures would extend this Commission's pro-market legacy.

The Concept Release suggests that the Commission may be coming to the view that the competitive costs of the joint ventures now outweigh their benefits. Predecessor Commissions found that the joining of the competing markets into these ventures was necessary or appropriate under the 1934 Act and that other 1934 Act purposes outweighed the competitive burdens. On the other hand, the sea change in technology over the last 25 years has clearly enabled solutions that were previously unavailable, and we can understand that this Commission may take a different view today. While we were and are willing to deal with the existing inefficiencies of the joint ventures if that is required, we would welcome the unfettering of competitive forces.

In sum, we believe that all of these factors mean that it is time to dissolve the joint ventures. While there are many transitional issues that must be addressed, we believe they are all manageable. Working with the Commission staff, with the other participants in the market data plans, and with the brokerage firms, vendors and other data recipients, we believe an orderly transition to competitive dissemination of market data could be effected by the end of this year.

* * *

We hope that this letter and its appendices at last bring facts and clarity to the debate and assist the Commission in making choices that will have a significant impact on the vitality, viability and operational stability of the U.S. securities markets in the years to come. We have shown that cost-based pricing by a Government bureaucracy is "a pallid substitute for competition", untenable as a way of assuring adequate and

fair funding of the markets, costly and without statutory foundation. We have also shown that the retention of the joint ventures, not to mention the superimposing of a supra-SRO body, exacerbates the issues discussed and implied by the Concept Release. We have pointed out how prolonging the joint ventures only serves to impede the market forces and the constituent self-determination that provide the key to resolution of these issues.

We believe that dissolution of the joint ventures is the appropriate solution. Accordingly, we have been authorized by our Board to seek the Commission's approval to withdraw from the CTA and CQ Plans.

Sincerely yours,

James E. Buck

Footnotes

1. The budgetary and cost-allocation process conducted by the Exchange's constituent board yields an allocation of costs to the Exchange's market data revenue source that provides the basis for the fees under the Consolidated Tape Association ("CTA") and Consolidated Quotation ("CQ") Plans. However, the Plans' revenue sharing formula, which is based on each market's proportion of trades in NYSE-listed stocks, entitles the Exchange to receive about 75 percent of the total revenue.) As a consequence, the sharing of the remaining 25 percent by the other markets does not correlate to their costs or the value of their data.
2. Also by way of assistance to the Commission and its staff, **Appendix A** lists the questions posed by the Concept Release and identifies where in this letter or in its appendices the questions are addressed.
3. Winston Churchill, November, 1947.
4. Pub. L. No. 94-29, 89 Stat. 97 (June 4, 1975).
5. The markets' right to charge for market data emanates, inter alia, from their proprietary rights in the data. As the Concept Release points out at pp. 26-29, the Supreme Court has affirmed those proprietary rights on multiple occasions. Commentators who argue that Section 11A's regulation equates to nationalization or other extinguishing of the markets' proprietary rights fail to understand the distinction that 70 years of Supreme Court decisions draw between (1) an overlay of Federal regulation of interstate commerce that preserves property rights and (2) a regulatory "taking" that, absent just compensation, would be unconstitutional.
6. The case in point (NASD/Instinet) is discussed in Appendix B at p. 21 and Appendix C-2 at pp. 39-40.
7. One of the PHB reports, "Issues Surrounding Cost-Based Regulation of Market Data Prices," provides a view of cost-based pricing from a historical regulatory perspective and is attached as **Appendix C-1**. The other, "The Economic Perspective on Regulation of Market Data," provides an economic assessment of cost-based pricing and is attached as **Appendix C-2**.
8. Given the importance we attach to a clear understanding of the purposes and effects of rate regulation in this area, we have authorized PHB, and their experts have agreed, to make themselves available to discuss these issues with the Commission and the Commission staff if that would be helpful.

9 In the last section of Appendix C-1, our rate-regulation experts take a detailed look at the history of rate regulation for the airline, natural gas, electric, telecommunications, cable television, oil pipeline, postal service, and railroad industries (i.e., the US industries that Congress and the states subjected to rate-regulation over the past century). In every single industry, the history reveals a clear march away from rate regulation.

10 The PHB experts also independently agree with our own observations and those of Debevoise & Plimpton (see Appendix B) that the 1934 Act does not contain the sort of specificity about rate regulation found in other statutory schemes that would support utility rate-making by the Commission. (See Appendix C-2, pp. 4-5 and 11-12.) In addition, they observe that the current form of regulation has been successful in making market data widely available, and that no case has been made that a change in regulation is needed.

11 Among other steps involved in introducing a price-setting regulatory regime, the Commission would have to determine that rate regulation of market data would make data more widely available to individual investors or otherwise improve their welfare; establish the basic principals of the form of cost-based regulation that it determines to best suit the securities industry, including appropriate rates of return and appropriate methods for evaluating asset bases (e.g., historical vs. replacement values); become intimately familiar with the day-to-day operations and costs of each SRO and assess all elements of production for each SRO, including trading floor and other infrastructure systems, redundant and back-up systems, excess capacity and security; determine rules for allocating fees between different business models (e.g., for equating fees for on-line services to fees for telephone-based services); define "direct costs" and permissible operating costs; determine the categories of costs in addition to "direct costs" that SROs may recover; determine rules for allocating overhead costs; codify categories and sub-categories of costs; establish a uniform system of accounts; perform an in-depth study of each market's structure; establish accounting rules relating to such things as cash or accrual accounting, capitalization, permissible depreciation and obsolescence methodologies, includable plant and equipment expenses, taxes, debt, losses, payroll allocations, extraordinary items, and contingent assets and liabilities; establish reasonable guidelines for allocating a market's many joint and common costs, including an assessment as to whether different allocation rules are appropriate for the different networks; establish rules for each network's initial setting of market data fees under the new regulatory regime and procedures for changing those rates; assess the effects of rates and rate changes on demands for (a) market data services, (b) the costs of supply and (c) other SRO services; establish reporting and record keeping rules and regulations; establish rules for fee adjustments necessitated by the entry of new SROs; establish rules for the distribution of market data revenues among SROs; establish rules for the allocation of a market's costs among multiple networks; review SRO cost studies; hold formal hearings (with briefs, reply briefs, testimony, witnesses, opinions, appeals, etc.) to review new fees and fee changes, and new regulatory rules or changes to those rules; hold a hearing for each SRO to determine its asset-base valuation and allowable rate of return; defend court challenges to its hearing determinations and to many of its other determinations; estimate the annual burden of any new reporting, record keeping or other regulation for the Office of Management and Budget; estimate the paperwork burden attendant to the new regulation as required by the Paperwork Reduction Act; hire attorneys, accountants, economists, consultants, lobbyists, programmers, data-entry personnel, personnel to respond to SRO inquiries, form reviewers, and enforcement/compliance personnel as necessary to perform all of the above functions; and determine whether each of the above-described steps require counterparts to distinguish between not-for-profit and for-profit SROs (e.g., two systems of accounts, two rate-of-return procedures and two sets of allowable depreciation methodologies).

In describing difficulties associated with those many functions, PHB uses such phrases as "has involved years of formulation," "can take several months, if not several years," "will prove controversial," "Herculean task," "rarely completed to the satisfaction of all parties," "not a trivial undertaking," "would be highly contested," "a regulatory agency would have a difficult time in achieving its goal," "hearings are often lengthy and contentious, with large volumes of evidence and supporting documentation," "cost studies contain volumes of information," and "significant problems attendant to measuring the cost of capital."

Once the new rate-making system becomes operational, the Commission would then have to perform the many functions necessary to maintain it and to monitor and enforce SRO compliance. And, of course, the regulated markets would have to take all of the steps necessary to institutionalize the Commission's new regulatory regime and to incur the many on-going obligations necessary to comply with that regime. According to PHB, history teaches that the markets will incur far greater costs and burdens than the Commission, noting one economist's estimate that regulation requires regulated firms and other governmental agencies to spend $40 for every $1 that the regulating agency spends.

12 Claire Wilcox, *Public Policies Toward Business*, (Irwin, 1966) at 476. Quoted in Appendix C-2, p. 19.

13 A more detailed review of the history of Network A pricing and evolution, as well as a record of what Network A has accomplished, can be found in **Appendix D**, "Network A in Perspective: 1975-2000".

14 Exchange Act Release No. 36542 (Nov. 30, 1995); 60 Fed. Reg. 62908, at p. 62910.

15 The Concept Release points to the potential demutualization of the markets as one of the concerns that in part supports its rate-making proposal. (Pp. 7-8.) Leaving aside the questions of how soon demutualization of the primary markets will actually occur and the wisdom of trying to anticipate the collateral consequences, we note that even the partial demutualization of the NASD represented by the NASD's proposed partial spin-off of the NASDAQ Stock Market anticipates the continuation of a constituent board structure at the NASDAQ level (as well as the NASD level) - as is the case at the NASD's Amex subsidiary today. This underscores that a board representation of all constituents is not the outgrowth of a broker-dealer cooperative: indeed, until 1972 in the case of the NYSE and 1996 in the case of the NASD, there was only nominal representation on their respective boards of non-industry constituents. Rather, non-industry constituent representation is the outgrowth of the markets' recognition of the necessity of enfranchising the broader constituency they serve (see, e.g., the NYSE's Martin Report of 1971 and the NASD's Rudman Report of 1995). In other words, a constituent board is completely compatible with a demutualized ownership structure and completely sustainable as a function of the requirements for exchange registration. The recent registration of the for-profit International Securities Exchange further underscores the point.

16 Neither the CTA Plan nor the CQ Plan provide for separately-incorporated organizations, redundant governing bodies or independent staffs. Meetings are at the level of operations personnel with no discretion to make fee or other substantive policy decisions. None of this is an accident.

17 Because it has been the target of attack, this cover letter addresses in detail the issues of fairly allocating costs between broker-dealers using the telephone/RR channel and those using the on-line channel, and of avoiding unreasonable discrimination between them. The Concept Release also seeks comment on other cost-allocation decisions represented by, e.g., enterprise caps and volume discounts for devices (pp. 74-75). We discuss those in Section I of Appendix E.

18 March 14, 2000, letter from David S. Pottruck, President and Co-Chief Executive Officer, Charles Schwab & Co. Inc. ("Schwab"), to Jonathan G. Katz, Secretary, SEC (the "Pottruck Letter"), p. 9.

19 See, e.g., "The Consumer and Investor Access to Information Act of 1999", Wednesday, June 30, 1999, House of Representatives, Committee on Commerce, Subcommittee on Finance and Hazardous Materials ("House Data Hearings"), p. 57. Schwab finally concedes this pass-through point in its comment letter responding to the Concept Release. Pottruck Letter, pp. 2, 5.

20 [Sic.] July 20 and 21, 1998, letters from Michael J. Anderson, as President, National Association of Discount Brokers, and as President, Ameritrade, Inc., to Jonathan Katz, Secretary, SEC, pp. 1.

21 Pottruck Letter, p. 5. However, E*Trade is still asserting that consumers pay the fees for the on-line channel and that no fees apply to the telephone/RR channel: "The only retail investors assessed fees for their consumption of market information are those that obtain it on-line." February 16, 2000, letter from Henry W. Carter, Chief Compliance Officer and Vice President, E*Trade Securities, Inc., to Jonathan G. Katz, Secretary, SEC (the "Carter Letter"), p. 3.

22 Pottruck Letter, pp. 5, 13.

23 See Sections pp. 10-13 of Appendix D.

24 See **Appendix E**, "Comments on: Fee Discounts, Plan and SRO Disclosure, Administration, and Pilot Programs", note 16, p. 7. Not surprisingly, the contribution of fees attributable to broker-dealers' and vendors' provision of Network A market data to non-professionals (both telephone/RR and on-line) has grown along with the increasing participation of individual investors in the market. However, fueled by the growth of the Internet, the shift *within* the non-professional category (i.e., between the two non-professional channels) has outpaced the overall growth in the category.

25 The two channels also lend themselves to different metrics. The telephone/RR model lends itself to a fixed access fee - an "all-you-can-eat" device fee. However, from the firm's perspective, it is also a "pay-as-you-go" proposition since, when customer demand takes up all its existing RRs' time, it adds more devices (and RRs). Brokerage firms providing on-line services have opted for a "pay as you go" per-quote fee (now subject to an "all you can eat" monthly cap of $1.00). The economists call this a two-part tariff problem (see Appendix C- 2, p. 10.) The key idea is that there are no simple "right" and "wrong" answers, as some commentators would suggest.

26 It was Network A's attempt to formally introduce into its rate schedule the approach of the winning pilot that precipitated the on-line brokers' campaign. *See* Appendix D, p. 15.

27 In testimony before the House Commerce Committee last summer, representatives of Ameritrade, DLJDirect and Schwab all testified that any savings from rate reductions would be "very definitely," "absolutely" or "definitely" passed on to their retail customers. House Data Hearings, supra n. 19, p. 57. Network A subsequently slashed its on-line rates by 80 percent in the case of nonprofessional subscriber device fees and by up to 75 percent in the case of per-quote fees. Yet we see no evidence that any of these firms passed through the savings.

E*Trade and Schwab also continue to portray the earlier (1997) change as a price increase. (Carter Letter, p. 4, n. 6; testimony of Mr. Charles Schwab, Senate Banking Committee Hearing on the "Financial Marketplace of the Future," Tuesday, February 29, 2000.) In fact, it was a substantial reduction. Network A revenues immediately declined 50 percent despite continuing explosive growth in the category. (See Appendix D, p. 17.)

28 See Appendix D, pp. 16 and 29. Comment letters from the on-line brokers that point to the 951 percent increase in the revenue from on-line fees from 1994 to 1998 neglect to mention the channel shift, the fact that the revenue increase lags the much more explosive growth in the on-line channel and the fact that the on-line revenues started from a near-zero base. Carter Letter, p. 2, Pottruck Letter, p. 2. See Appendix D, pp. 15-17.

29 Schwab's David Pottruck was quoted as saying that the proposal was "a huge step in the right direction." Greg Ip, "Big Board Proposal to Cut Fees Charged for Stock Quotes Cheers Online Brokers," Wall Street Journal, April 2,1999, p. C17. Schwab echoed the sentiment this past fall when the Commission approved the proposal. "NYSE Fee Plan for Quotes Receives SEC's Approval," Wall Street Journal, October 8,1999.

30 See also Section 1 of Appendix E.

31 As the Commission recently pointed out in noticing our filing to rescind our off-board trading rule, "Ultimately, only fair and vigorous competition can be relied upon to set efficient prices." Exchange Act Release No. 34-42450, February 23, 2000, p. 33. Schwab embraces the same kind of approach: "If the forces of competition and supply and demand are allowed to work here and there is good input from all parties, we think there is no rate making necessary." House Data Hearings, supra n. 19, p. 60.

32 The Commission and the Exchange agree that the issues discussed by the Concept Release arise from the joint dissemination that followed from the adoption of the 1975 Amendments. A senior SEC staff member said recently that "We're here because Congress set up the idea of a consolidated quote system, . . . essentially a monopoly." (BNA, Broker-Dealer Compliance, Vol. 2, No. 5, March 8, 2000.) It is important to remember, however, that Congress did not *mandate* joint dissemination. See Appendix B, pp. 7-8.

33 "Visible Prices, Accessible Markets, Order Interaction," Remarks of Chairman Arthur Levitt at Northwestern University School of Law, Kellogg Graduate School of Management, March 16, 2000, p. 5-6.

34 Whether there are four contracting authorities, as today, or several more in the future as a result of dissolution of the joint venture, we pledge to continue our work on easing the administrative burdens on the data recipients by seeking to standardize contract forms, policies and reporting requirements, to devise price structures that do not depend on counting devices, subscribers or quotes, and to bring more technology to bear to the process. (See Appendix E, p. 10.) In addition, to the extent that either the direct data recipients or the current plan participants were to find it cost-effective to use the Securities Industry Automation Corporation as a non-exclusive processor at market rates, we would have no objection.

Questions submitted for the record by Congressman Mike Oxley

1. *In one of the appendices to Mr. Knight's testimony, he states that non-SROs, like ECNS, market makers, specialists, broker-dealers, investors, and market data vendors, should have a voice in the operation of the market data plans. But he also observes that "it is inconsistent with Section 11A of the Exchange Act to allow non-SROs to participate directly in Plan governance." Why shouldn't Congress amend Section 11A to allow for this?*

The existing consortium brings together competitors to jointly disseminate data and determine fees. In the absence of a technical need to do so, such joint action creates a burden on competition that cannot be justified as the 1934 Act requires. Thus, adding non-SROs to the consortia is moving in the wrong direction. Congress should amend section 11A to preclude the SEC from requiring SROs to act jointly in this regard.

2. *Ms. Dwyer points out in her testimony that third party vendors should be offered the opportunity to disseminate unconsolidated data (including multiple levels of price and depth information). She suggests "let the exchanges compete with other market data vendors base on price and quality of services." Does anyone disagree?*

Our Board of Directors authorized our withdrawal from the market data consortia over a year ago. So we completely agree that creating a new consortium for the dissemination of limit orders would be moving in the wrong direction, just as adding non-SROs to the present consortia (rather than permitting the current SROs to withdraw from them) would be a step backwards.

Since last sale prices and quotations are generated by our auction through the interaction of orders and other trading interest and then supplied to vendors, we do not understand what Ms. Dwyer has in mind when she suggests that "exchanges [should] compete with other ... vendors".

If the point is directed to data not uniquely generated by SROs (i.e., to limit orders), we completely agree that the area can and should remain unregulated.

3. *If third party vendors were permitted to do this, how could they compete against a market, such as the NYSE, that has 85% of the liquidity and therefore all of the useful information anybody would want about the listed market?*

For the reason stated in response to question 2, we are unable to answer the question if it is directed to last sale prices and quotations.

However, we note in that regard that it is the nature of an exchange to centralize orders in order to maximize their interaction without the intervention of a dealer and thereby to assure efficient price discovery. So references to market share in our context have a different meaning then in other contexts.

If the concern is about the potential for the Exchange to limit access or not fairly allocate our costs, then the concerns are misplaced. The organization of the Exchange as a cooperative and

the complementary provision of the 1934 Act requiring that representatives of our direct and indirect users comprise our Board of Directors provide a "first line of defense". As the second line of defense, the 1934 Act gives the SEC oversight responsibility to assure that we disseminate quotes and last sale prices on fair and reasonable terms and in a manner that is not unreasonably discriminatory.

To the extent that the concern is directed to data not uniquely generated by SROs (i.e., to limit orders), it is misplaced. Nothing prevents broker-dealers from independently making their limit orders available to venders in addition to routing them to the Exchange for execution. So the Exchange does not have "all of the useful information" in that regard.

4. *The Federal securities laws mandate that the terms for market data distribution be "fair and reasonable" and "not unreasonably discriminatory." Is this mandate effectively being enforced? What evidence do you have for your response?*

   As noted, the mandate is self-enforcing since we are organized as a cooperative and representatives of the users who pay the market data fees comprise our Board of Directors.

   Evidence that this structure is working include: (1) the prices for NYSE market data services have either declined or remained unchanged since the mid-1970s and (2) the cost of our market data has declined 81 percent over the past 15 years. Providing further proof is the long-term stability of the share of our costs recovered by market data: that share has not exceeded 25 percent of our revenue in 75 years, nor 18 percent of our revenue since the enactment of that mandate.

   The fact that the campaign of a single user to avoid fair allocation of costs has attracted so little support from the rest of our users suggests that the current structure reflect a broad consensus among users.

5. *It appears that the current contracting process is unnecessarily complicated and results in high administrative costs to vendors and subscribers. Do you object to streamlining this process and making the resulting contractual terms uniform and public?*

   All of our contractual terms are uniform and public. We protect the technical exhibits from public disclosure because they contain proprietary information and trade secrets of vendors and brokers. With the consent of the vendors and brokers, we would make these exhibits public.

   The administrative burdens that both the Exchange and our users face arise from the mandates that our pricing terms be fair and not unreasonably discriminatory. Unfortunately, one size does ***not*** fit all -- ***failure*** to discriminate is often unfair. For example, enterprise fees standing alone cause smaller firms to pay more per device or per quote than large firms. In addition, we charge much lower fees for the receipt and use of real-time data by retail consumers than by brokers and other professional users, which most commentators view as a fair and reasonable discrimination. And if we did not have a per-quote fee for Internet disseminator to consumers, the device charges that apply to telephone dissemination to consumers by brokers would preclude Internet dissemination.

The market data community has long discussed the question of how to reduce the administrative complexity and intrusiveness that arises from these fair and reasonable discriminations. Unfortunately, no one has yet come forward with a better, revenue-neutral answer that did not itself create new, unreasonable discriminations.

6. *Mr. Bell's testimony states that the 1975 securities amendments "crafted a regulatory and legal regime for a world without online brokerages, a world without ECNs, w world without modern communications systems, a world where exchanges were content to serve as not-for-profit public utilities." Why must the rules governing market data be updated?*

With two notable exceptions, the "regulatory and legal scheme" as it pertains to market data has worked pretty well within its intended context: the real-time dissemination of last sale prices and bid-asked quotations.

The first exception relates to the SEC's authority to mandate market data consortia. As noted above, we believe the SEC's authority to force an SRO to participate in a consortium should be scaled back to an ability to approve voluntary participation.

The second exception relates to the SEC's oversight of SRO and vender fees. The SEC has been lobbied hard to find in the 1934 Act a requirement that it engage in utility rate-making, rather than that it rely primarily on the SRO governance mechanisms. That reading of the statute has no basis either in the statute's legislative history or in the self-regulatory logic that the statute embraces. We believe that such a reading should be explicitly foreclosed by an appropriate amendment.

Also due to intense lobbying pressure, the SEC has recently begun to take a more expansive reading of the data and activity covered by this scheme. The SEC seeks to extend the scope substantively to data not uniquely generated by SROs (i.e., to limit orders). It also seeks to extend the SRO filing requirements beyond activities that are unique to SROs (i.e., to SRO display of data on web sites). These two extensions place the SROs at a competitive disadvantage vis-a-vis brokers, venders and others who can provide non-unique data and engage in non-unique activities free of these regulatory, and therefore competitive, burdens. Thus, we also suggest foreclosing such an expansive reading by appropriate amendments.

Questions submitted by Congressman Doug Ose

1. *Is market data public property? Is it a constructed product? Is it appropriate to charge money for market data?*

The NYSE has been charging for market data for over 130 years. More than 150 exchanges around the globe currently charge fees for market data.

In cases reaching back 100 years, the Supreme Court has repeatedly upheld the proprietary rights of exchanges in market data. Congress thought it was engaged in regulation, not expropriation, when it gave the SEC specific oversight responsibilities in this area in 1975.

Market data is "constructed" on the Exchange through the integration of customer orders and dealer interest both to determine the priority of an order or interest in the auction (the highest bid

and the lowest offer being the "quote") and whether an execution takes place (the report of the price and size of the execution being the "last sale price").

The "work" performed to generate quotes and last sale prices underlies one of the bases of the Exchange's proprietary rights, the common law of misappropriation. An appropriate federal misappropriation law (i.e., a database protection law) would enable us to reduce our reliance on contracts and thereby simplify contract administration.

In 2000, the Exchange incurred $ 700 million in operating its market and developing it systems to handle, inter alia, the increasing demand for its execution and market data services. The determination by the representatives of our users to allocate a portion of those operating and development costs among themselves through fees based on their use of market data has a 130-year history and seems like an appropriate decision for our users to make.

WRITTEN TESTIMONY OF CARRIE E. DWYER
GENERAL COUNSEL AND EXECUTIVE VICE PRESIDENT
THE CHARLES SCHWAB CORPORATION

BEFORE THE FINANCIAL SERVICES SUBCOMMITTEE
ON CAPITAL MARKETS, INSURANCE
AND GOVERNMENT-SPONSORED ENTERPRISES
U.S. HOUSE OF REPRESENTATIVES

MARCH 14, 2001

Chairman Baker, Congressman Kanjorski, and distinguished members of the subcommittee: My name is Carrie Dwyer, and I am General Counsel and Executive Vice President of The Charles Schwab Corporation, one of the nation's largest financial services firms. Schwab was founded more than 25 years ago as a pioneer in discount brokerage. With the acquisition last year of U.S. Trust, Schwab became the first firm to form a financial holding company under the provisions of Gramm-Leach-Bliley. Today, we have more than 7.6 million active accounts with more than $845 billion in client assets. About 4.3 million of those accounts are online accounts, making Schwab by far the largest online brokerage in the world. I would like to thank you for the opportunity to present Schwab's views on one of the most important issues facing the U.S. capital markets today: the cost and availability of market data.

As you may be aware, in many ways Schwab launched the discussion of this issue in June 1999 when we submitted a formal rulemaking petition to the SEC to review and correct what we believed to be the unreasonable and discriminatory market-data fee structure. In December 1999, the SEC issued a "concept release" requesting comments on several approaches to reforming the market data structure. The Commission received numerous comments that reflected divided views. In September 2000, the Commission formed an Advisory Committee on Market Information, chaired by Dean Joel Seligman of the Washington University School of Law, to examine the issue in depth and make recommendations to the Commission. I sit on that Advisory Committee, along with 24 other members representing a wide variety of companies and organizations. While consensus is emerging among the participants that the current system is flawed, deep divisions exist over what the appropriate solution should be. For that reason, I am pleased that Congress -- this subcommittee in particular -- is taking an active interest in monitoring this issue.

Historical Background: What is Market Data?

Market data is industry jargon for the prices at which investors are willing to buy and sell securities, and the prices of completed transactions. Real-time market data -- that is, data that shows transactions and quotations as they are occurring -- is collected from the broker-dealer members of the stock markets by registered securities information processors, like the Consolidated Tape Association. These processors package and distribute the market data to information vendors, like Bloomberg, and also to broker-dealers. Investors rely on this

information to evaluate potential investments and to determine the best prices available in the market.

What we so blandly call "market data" is the lifeblood of our markets, the oxygen that they breathe, the most important component of what we call transparency. "Transparency" is industry jargon for fairness – the ability of investors large and small to really see where the market is at a given moment in time. The widespread availability of accurate market data is not only the reason for the unparalleled strength of our markets, but the key to democratizing our markets – allowing all market participants from the largest institutional investor to the single mom saving whatever she can save each month for her daughter's college education to make informed investment decisions. Of course, it wasn't always that way. Prior to Congress' adoption in 1975 of amendments to the Securities Exchange Act, individuals could not see for themselves accurate, timely market information. They had to obtain market information from an intermediary, such as their broker, or they could look in the next day's newspaper to see what happened. Individual investors also had little hope of finding the best price, or even knowing whether the price they received was fair.

In 1975, Congress created a national market system for securities and identified the democratization of quote and transaction information as a core principle for that system. The system linked all stock exchanges and over-the-counter markets to make information widely available and to allow investors to enter orders in one market yet still benefit from better prices available on another market. Congress required the various markets to enter into joint plans for collection and distribution of market information to ensure that all those who trade securities could have "accurate, up-to-the-second information as to the prices at which transactions in particular securities are taking place."[1] Congress envisioned that a consortium of exchanges would collect and disseminate the information in an "absolutely neutral" manner.[2] The consolidation process was organized in such a way that it gave the exchanges monopolistic power over the distribution of the information. In the 26 years since passage of the Amendments, the exchanges have used that monopoly to control every aspect of market information: the format, the speed, who can receive it, when they can receive it and how much it costs. These consortia of exchanges sell the quote and sale information to every market user, and split the proceeds among themselves, on a volume-based formula. The creation of a monopoly system may have been necessary in 1975, but computer and communications technology has advanced so significantly in the years since, that it no longer makes sense. The irony is that the system created to widely disseminate market information now functions as a barrier to cheaper more innovative use of data.

Schwab, like most brokerage firms, purchases market data from the registered securities information processors. Schwab then distributes real-time quotes and transaction prices to our customers, either online, over the phone or in person at a branch office. For the privilege of distributing this fundamental information to our customers, Schwab paid approximately $19 million to the exchanges in 1999. The New York Stock Exchange, the American Stock Exchange and the NASDAQ together collected more than $400 million in market data fees in 1999. That represents more than a third of the Amex's revenue; nearly 18 percent of the NYSE's

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[1] Senate Report 94-75.
[2] Ibid., p. 189.

revenue. Market data fees represent such a significant amount of money that discussions about opening the system to competition become very difficult.

Impact of Online Investing on Market Data Use

One of the most important factors in the market data controversy is the growth of interest in the markets – and in market data. Information on revenue is scarce, but in its 1999 Annual Report, the National Association of Securities Dealers, Inc., the parent of both the NASDAQ and the American Stock Exchange, noted an 18 percent increase in its revenue from market information services – to more than $276 million in 1999. It attributed that growth in part to "a significant increase in the amount of non-professional quote inquiries."[3] The New York Stock Exchange reported a 9 percent increase in market data revenue from 1998 to 1999 – totaling more than $125 million in 1999.

The simple fact is that more Americans have invested in the stock market than ever before, and more people check their portfolios more often. The Internet has facilitated this process. No longer required to have a conversation with a broker, an individual can hit the "refresh" button on his computer 10, 20, 50 times a day to see the latest information. With automated access to brokerage firms by wireless Internet, a customer can check her IRA while walking down the street if she chooses. Our own internal research found that in the days when our customers relied primarily on telephone orders, they asked for (and the firm bought) about 10 quotes for every trade. With online trading, Schwab buys in the range of 75 quotes per trade. While we encourage this trend, because it gives investors more knowledge, it is also clear that online investing has had a radical impact on market data revenue. If investors can have better information, they will make use of it.

When investors go online to check their stock positions or account balances, they reasonably expect to see the most up-to-date pricing information. Unfortunately, it is cost prohibitive for Schwab to offer real-time quotes to every customer. As a result, for some functions, we offer customers quotes that are delayed 20 minutes – which in today's market might as well be 20 days old, given their usefulness to investors. At a customer's request, we provide a limited number of real-time quotes free of charge, usually with a monthly limit; for customers who want real-time, unlimited, streaming quotes, we charge an additional fee. The technology exists today to make real-time streaming quotes available to every individual investor, but cost prevents us and most other major brokers from doing so.

Schwab's Petition for Rulemaking with Regard to Market Data Fees

We believe strongly that the current fee structure discriminates against individual investors. For example, online retail investors must either pay a per quote fee ranging from a half-penny to a penny, or a fixed monthly fee of $4.00 for Level I quotes. To see the real depth of the market, Nasdaq's Level II quotes, an additional $10 fee is charged. Firms like Schwab absorb the majority of these fees, but the reality is that they are passed on to customers, either directly or indirectly – they are built into the fee we charge customers for making a trade. The bottom line is that the fees are unreasonable –we paid more than $1.6 million for market data in

[3] National Association of Securities Dealers, Inc., *1999 Annual Report*, p. 35.

January of this year, a 30 percent increase over the monthly average for fees in 2000. Brokerage firms that deliver market data to their customers the old-fashioned way -- via a broker– pay a fixed monthly fee per terminal, no matter how many quotations they deliver. We think this fee structure penalizes investors using Internet technology, hinders direct investor access to market data, and has resulted in online brokers and their retail customers paying grossly excessive market data fees.

As a result, in June 1999, Schwab filed a petition with the SEC requesting that it institute rulemaking to govern the terms of access to market data. We requested that the rules ensure that market data fees are allocated in a fair, reasonable and non-discriminatory manner consistent with section 11A of the Exchange Act. We asked for more public disclosure of the fees, costs, contracts and policies relating to the collection and dissemination of market data. We believe it is impossible to determine whether the market data system is operated in a fair and non-discriminatory fashion if its terms are not fully open to public view. The current system is not transparent. For example, the processors have in the past avoided public and regulatory scrutiny in a number of instances by instituting fee changes through "pilot" programs that were not filed with the SEC for review, approval and, importantly, public notice and comment.

Schwab believed that SEC intervention into this matter was critical for a fair and prompt resolution of these issues for several reasons, many of which are relevant to this subcommittee's work. For example, although the processors are directed by the Exchange Act to distribute market data in a fair, reasonable and non-discriminatory manner, the processors are operated by joint action of the existing securities markets, and those markets share in the processors' revenues. Combined with the absence of public and industry representation on the processors' boards, it could be only natural for the processors' operations to favor the interests of the individual stock markets, rather than the interests of all market participants. This is exemplified by the recent programs offered by several markets to rebate a portion of the fees paid by certain market participants based on their volume of trades in that market, for the purpose of capturing order flow. These programs help the markets involved to compete, but do not foster the goals of widespread and fair dissemination of market data to all investors.

The SEC Concept Release on the Regulation of Market Information Fees and Revenues, issued in December 1999, represented the Commission's first step toward addressing the problem. Finding a lack of consensus on a rate-making approach, the SEC in September 2000 formed the Advisory Commission on Market Information to address this complex issue in more detail. That panel's report and recommendations are expected early this fall. The first meetings have shown areas of consensus – most notably around the general notion that the system is flawed – but broad agreement on a solution seems likely to be elusive, and it has been a glacially slow process. Several members, including Schwab, have offered various frameworks for possible reform.

Core Principles of Reform

The need for reform of the market data system is driven by the simple change in the end user over the last 25 years. The investing public has become the American public; more than half of all American households are invested in the stock market, either directly through

securities or mutual funds, or indirectly through pension plans or other vehicles. And those investors are watching their portfolios very carefully, particularly in the volatile market in which we have found ourselves in the last year. There is an unquenchable appetite for information, accessible anytime, from anywhere, via television, the Internet, through handheld devices, even on cellular telephones. Investors are demanding these and other options, and companies like Schwab are striving to meet that demand with ever-more innovative products and services. The biggest hurdle is the cost and inflexibility of the current market data structure.

We at Schwab have long advocated more efficient and fair processing and dissemination of market data by talking about the fundamental principles that should govern the process. We believe there are several ways to achieve the national market system goals set forth by Congress. Rather than propose a specific legislative or regulatory solution, let me instead sketch some broad principles that should be the core of any reform plan:

First, reform must promote competition. To introduce market discipline and foster innovation, third-party vendors should be offered the opportunity to disseminate unconsolidated market data (including multiple levels of price and depth information) independently. Competition at all levels of the market data system will foster innovation to take advantage of electronic technologies, leading to the creation of market data products that better serve the needs of today's investors. Under the current system the exchanges have no particular incentive to continue to develop improved market data products that benefit investors, since they have no competition – market data comes in the manner and quality decreed by the exchanges. Let's let the exchanges compete with other market data vendors based on price and quality of service. Anyone wishing to compete to provide market data should ensure that access to market data is on fair, reasonable and non-discriminatory terms, as required by Section 11A of the Exchange Act.

Second, reform must ensure that no one has ownership over market data. For the last several years, the exchanges have been advocating database protection legislation on Capitol Hill that would give them an historical property right over market data. But market information is a set of facts, plain and simple: bids, offers, limit order prices, last sale prices. No one can own these facts. Investors and broker-dealers, not exchanges, create these "facts." Granting market data ownership or copyright protection to any one party would be antithetical to the very purposes of the national market system and to longstanding principles of intellectual property law.

Third, the market data system must become more transparent. Market data fees should be set in the sunshine. Greater transparency of the fees, costs, contracts and policies relative to the collection and dissemination of market data is essential to creating a fair and open system. One of the ongoing frustrations broker-dealers and individual investors have had with the market data issue is the secrecy that cloaks the process. Each entity works out its own contracts with the exchanges, meaning there may be side agreements, specially negotiated rates and "pilot programs" of reduced rates that are outside of the SEC's full oversight. Market data reform should require that fee schedules and all contract terms are made publicly available. There should also be an end to pilot programs that treat investors with one firm differently from investors using a competing firm. Transparency is the hallmark of our markets – so should it be the hallmark of our market information.

Fourth, reform must result in a level playing field. Ensuring the broadest possible access to market data is essential to the protection of investors and the fairness of our markets for everyone. Schwab believes that access to this data on fair and equitable terms is critical to ensuring that all investors, no matter where or how they trade, have the information that is essential to making fully informed investment decisions. All retail customers at all firms depend on this. Individual investors must be able to access critical market information at the same time and on the same terms as large institutional investors and other market participants.

In addition, the playing field must be level for online brokers and traditional brokers. For the most, online brokers continue to pay fees either by the quote or by the customer. Traditional brokers, on the other hand, are more likely to pay a flat monthly fee, regardless of the numbers of quotes they and their customers request. Investors who use online brokerages should not be penalized by a different fee system for the same information. While recent fee cuts by the major exchanges have helped close the gap, too many fee reductions are part of "pilot programs" that expire, often without the investor even being aware of the changing rates. The by-quote and by-customer quote prices fluctuate – they shouldn't.

Ironically, both the NYSE and the NASDAQ announced in the last several months that they plan to make real-time quotes available to the public on their Web sites for free. We applaud the sentiment behind this gesture. Without question, it is good for investors. But the exchanges plan to continue to force Schwab and other market participants to pay fees to offer the exact same information to customers. It is a baldly anti-competitive position. Customers should have the same access to the same information for the same price, regardless of where and how they access that information.

If competition is not brought into the market data arena, it will be necessary for the SEC to separate the vending of market data from the self-regulatory functions of the exchanges. The exchanges have asserted that the excess market-data revenues are used to fund their self-regulatory obligations -- to surveil the markets for fraud, abuse and other violations of the securities laws. We don't believe the Exchange Act permits this, but perhaps more important, the exchanges have not shown this to be the case. As important as self-regulation is, it should not be allowed to act as a shield to protect an unfair market data system. The costs of self-regulation should be borne by exchange members directly, as we believe they are through existing fees and dues, and not transferred to retail investors seeking access to market data.

Moreover, the exchanges recently proposed a rule change to implement a new "trading floor regulatory fee," which, according to the proposal, is being used to "partially" offset the cost of market surveillance. Although the exact amount of revenue that the exchanges will realize from this proposed fee is unknown, we estimate it to be in excess of $30 million. In making the proposal, the exchanges want it both ways – they want to retain the hundreds of millions of dollars they collect for surveillance via market data fees <u>and</u> impose a new fee to generate $30 million of additional income for the same purpose. All of this without revealing in either context exactly how much it costs to surveil the markets. Schwab has petitioned the SEC to reject the proposed new fees until the exchanges make a corresponding reduction in market data fees and provide adequate justification for the amount and allocation of the fee.

The 1975 Amendments to the Exchange Act were designed to open more fully the national securities markets to the free play of competition and to prevent unreasonable restraints on access to services and market information. Through the 1975 Amendments, Congress gave the SEC the authority to intervene in those situations where competition would not be sufficient to protect these interests. We are faced with such a situation. Technological advances, changes in the market and the rise of the individual investor have combined to radically transform the way market data is used today. It is time for the SEC to re-evaluate the entire framework by which market information is made available to investors, end the monopoly, and create a new system whose hallmarks are fairness, non-discrimination and competition.

Thank you very much for the opportunity to offer Schwab's views on this important issue.

Testimony

of
Edward S. Knight
Executive Vice President and General Counsel
The Nasdaq Stock Market

before the

House Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises

on

Public Access to Stock Market Data – Improving Transparency and Competition

March 14, 2001

Introduction

Mr. Chairman, members of the Subcommittee, I am Edward Knight, Executive Vice President and General Counsel of the Nasdaq Stock Market.[1] We welcome this opportunity to discuss with you Nasdaq's views on the important issue of market data and our long-standing commitment to enhancing the availability and the utility of the information we provide. While Nasdaq is commonly viewed as a premier marketplace for trading securities, Nasdaq plays an equally integral and necessary role as an information provider. A critical component of the success of the Nasdaq Stock Market, and thus the value of the market to the economy, is the integrity and wide spread availability of our quote and trade data.

The value of our market data is derived by the interrelation of every aspect of the Nasdaq Stock Market: (1) its ability to attract and retain quality issuers; (2) the quality of its trading environment; and (3) its efforts to monitor and regulate the marketplace. Additionally, Nasdaq already operates in a competitive environment, and the market structure changes on the horizon will increase the competitive landscape. As a company that was born and has thrived in an openly competitive listings environment, Nasdaq embraces competition and wishes to operate within a healthy competitive market system where fees are based on the value that a competitor brings to the marketplace.

At the same time, Nasdaq recognizes that its market data is a critical component of each investor's decision-making process, and is committed to disseminating market data to a broad population of investors and industry professionals. In fact, today Nasdaq's market data is distributed to over 550,000 industry professionals and millions of individual investors.

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[1] The Nasdaq Stock Market is the largest electronic, screen-based market in the world, capable of handling trading levels of at least four billion shares a day. Nasdaq lists nearly 5,000 companies, has the largest dollar volume of trades of any financial market, and trades more shares per day than any other U.S. market. Current market capitalization is more than $3 trillion.

Additionally, in response to the growth of online investing and Internet use, Nasdaq has taken proactive steps to lower the investor's cost of access to its vital market data by 50% in 1999 and by another 50% in 2000 to a cap of $1 per month per user, while continuing to ensure that it captures the value that the data holds to industry professionals and individual investors. Nasdaq employs an inclusive and exhaustive process for setting market data fees, and then openly communicates its market data fees and terms and conditions through its web site.

As this testimony will demonstrate, Nasdaq remains committed to offering broad access to its valuable market data while operating in an increasingly competitive environment.

Background

The Nasdaq Stock Market, Inc., formed in 1971, has become a cornerstone of the American capital markets. Our competing market maker structure and open architecture have facilitated the capital formation of thousands of U.S. companies and have contributed to the success of a broad range of market participants, including broker/dealers, electronic communications networks ("ECNs"), and online trading firms – all of which serve the American public in their investing needs. Nasdaq's advanced technology and state-of-the-art network act as the central quotation and trading engine for Nasdaq market activity. The regulator for Nasdaq,[2] NASD Regulation, Inc., has authority over every U.S. broker/dealer, as well as authority over issuers listed on Nasdaq, quoted on the OTC Bulletin Board, and otherwise traded over-the-counter ("OTC"). The protections that NASD Regulation provides enable the investing public to feel confidence in the National Market System ("NMS") and in Nasdaq as a quality place to invest their hard-earned dollars.

[2] Nasdaq has contracted with NASD Regulation to perform its regulatory functions.

Nasdaq is not only a preeminent stock market; at its core, Nasdaq serves as a vital information provider to the American people. Nasdaq's market data is a critical part of each investor's decision-making process. To make an informed investment decision, an investor must have access to the prevailing market price of a particular security and the price of the most recent trade in that security. Nasdaq's entire operation as a quotation facility, execution and trade reporting facility, and regulatory organization converge to offer investors the best possible quote and trade information. Ultimately, the widespread availability of Nasdaq's quote and trade data is a critical component of Nasdaq's past and future success as a stock market. We remain committed to ensuring broad access to our market data. In short, we are in the information business. Broad access to timely, accurate and reliable information is the hallmark of Nasdaq's success.

Value of Nasdaq Market Data

Nasdaq is keenly aware of its responsibility to ensure that all market participants have easy, cost-effective access to timely and accurate market data. But such data does not occur by chance. Rather it is only produced in the context of a marketplace characterized by fair regulation, state-of-the-art technology, and an open architecture that promotes liquidity and transparency. Exhibit 1 illustrates how Nasdaq provides value to our market data for the benefit of market participants and the investing public. We are firmly committed to ensuring wide access to our market data, subject to the most stringent quality control standards.

In other words, market information should not be viewed solely as a by-product of trading activity. More appropriately, it should be viewed as the end result of a complex set of actions by Nasdaq's core operations, which are to: (1) attract and retain quality issuers; (2) develop a highly-competitive market structure for quoting and trading activity; (3) perform extensive surveillance

and regulation of market participants and issuers; and, ultimately, (4) fulfill our goal to provide the investing public the best market in the world.

The value of our market data relies on the successful operation of every aspect of Nasdaq. Without our quality issuers, Nasdaq would not attract the level of trading volume and investor confidence it does today, which would result in a loss of the breadth and depth of market participants (broker/dealers and ECNs) to handle customer orders, and, ultimately, the value that investors place on the market data to make informed investment decisions.

In addition, the overall regulatory umbrella that Nasdaq investors enjoy is also a critical component of our accurate and reliable market data. The role of a self-regulatory organization (or "SRO") in the marketplace, as mandated by Congress in the Securities Exchange Act of 1934, as amended ("Exchange Act"), is highly specialized, and comes with significant costs and responsibilities. For example, SROs must, among other things:

(1) Operate a well-defined market in accordance with the Exchange Act;

(2) Comply with the requirements established in the SEC's automation review program (or "ARP") with respect to capacity, stress testing, and quality assurances of their technological infrastructures;

(3) Promulgate rules designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and to refrain from imposing unnecessary or inappropriate burdens on competition;

(4) Establish surveillance programs to detect any violations of such rules;

(5) Promulgate and enforce compliance by their members and their associated persons with the federal securities laws and SRO rules that govern all aspects of their members' securities business;

(6) Conduct examinations of their members, monitor financial and operational reports, and investigate potential violations of applicable federal and SRO rules; and

(7) Establish and maintain listing standards that govern the securities that may be traded in their respective markets.

Ultimately, the value of a market's information depends on the quality of the market's operation and regulation. As the SEC observed in its concept release on market data:

> Information is worthless if it is cut off during a systems outage (particularly during a volatile, high-volume trading day when reliable access to market information is most critical), tainted by fraud or manipulation, or simply fails to reflect accurately the buying and selling interest in a security. Consequently, there is a direct connection between the value of a market's information and the resources allocated to operating and regulating that market.[3]

The quality of our market data is the product of everything that stands behind and is part of Nasdaq.

Competitive Landscape

Nasdaq welcomes the increased competition that characterizes today's market environment. We, of course, have long competed for listings. Increasingly, the quality of Nasdaq's market structure is a more central focus of its competitive position in the marketplace on a number of fronts. As we seek to become a registered national securities exchange, the trading environment for Nasdaq-listed securities will open itself up further to new potential competitors. In response, we have developed a new integrated order display facility – SuperMontage℠ – that will form the backbone of our market.

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[3] See *Regulation of Market Information Fees and Revenues*, Exchange Act Release No. 42208 (December 10, 1999) Section I.

Even before any Nasdaq market structure changes begin to take effect, the competitive environment today is evolving. Already, the Chicago Stock Exchange is an active trading participant in Nasdaq-listed securities.[4] In October 2000, the Cincinnati Stock Exchange commenced quoting and trading in Nasdaq-listed securities. The Philadelphia Stock Exchange and Boston Stock Exchange are preparing their operations for trading in Nasdaq-listed securities. Archipelago has acquired the Pacific Exchange and has an amendment to the Pacific Exchange's exchange registration pending at the SEC, and Island has an application for exchange registration pending with the SEC. These entities will provide new choices for market participants to trade, and for the investing public to place their orders to obtain a quality execution in Nasdaq-listed stocks.

Nasdaq supports the SEC's efforts through the SEC Advisory Committee on Market Information, chaired by Dean Joel Seligman, to evaluate Section 11A of the Exchange Act and the Securities Act Amendments of 1975 (the "1975 Amendments"). Nasdaq has submitted a "White Paper" to the Seligman Committee expressing its views on this important issue. The White Paper is attached as Exhibit 2 (and is available at www.fisd.net/news/sec_nasdaq022101sub.pdf), and presents Nasdaq's views and recommendations on how the framework for market information should be adjusted to strike a more fitting balance between regulation and competition. Specifically, we urge that restrictions on competition in the area of market data should be reduced or eliminated insofar as is practical and consistent with the public interest, especially those restrictions that – however suited to the 1970s – no longer make sense in today's market environment. This should be accomplished either by limiting the compulsory nature of joint NMS plan participation (for example, by creating alternatives to compulsory participation) or by limiting

[4] The Chicago Stock Exchange participates in the trading of Nasdaq stocks through the Nasdaq/National Market System/Unlisted-Trading-Privileges Plan ("UTP Plan"), approved by the SEC on a pilot basis in 1990. An exchange

the scope of compulsory participation to what is necessary to accomplish the purposes of the 1975 Amendments and leaving the rest to competition.

Nasdaq proposes two alternatives for collecting and disseminating market data. Under our preferred market choice alternative, each exchange and SRO would choose whether to participate in a NMS plan governing last sale and quotation information and make its data available to non-exclusive or competing market data vendors. Non-exclusive or competing securities information processors would collect, process, and consolidate the last sale and best bid and offer ("BBO") for each covered security, determine the National Best Bid and Offer ("NBBO"), and make the consolidated data available to other market data vendors, broker-dealers, and end users. Each exchange would negotiate separately for the sale of that information plus enhanced information – such as the full depth of the respective trading books – to market data vendors, broker-dealers, and subscribers.

Guiding Nasdaq's position are four basic principles that a workable market data structure should promote: (1) competition among all market participants; (2) wide availability of consolidated last sale and NBBO information; (3) fair and reasonable access to that market information; and 4) market data integrity, by encouraging the highest level of operational capacity for responsible processors of market information.

As reflected in our White Paper to the Seligman Committee, Nasdaq embraces this increasingly competitive environment. Competition drives innovation and quality. Nasdaq welcomes the opportunity to compete as a quality market, and constantly seeks ways to innovate and improve on our market structure and operations to attract investor order flow. However, for competition to work, everyone must operate on a fair and level playing field, and must be able to derive value from their products. Market data is, and will continue to be, a critical component of

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may trade Nasdaq-listed securities once it becomes a full participant of the Plan.

Nasdaq and each competing market. The value that the investing public places on each market's market data should continue to be factored into the price each market is able to charge for that data. Nasdaq understands that the distribution to investors of a consolidated quotation and last sale price is critical to the success of the NMS. Nonetheless, Nasdaq also asks that regulators and Congress recognize the virtue of having markets compete on the value of the market data they generate.

Price-Setting Process

Nasdaq and other members of the UTP Plan employ an exhaustive process in establishing market data fees to ensure that each constituent group involved in Nasdaq securities views the fees as fair and reasonable, while also reflecting the market data's value to the marketplace. Exhibit 3 provides an overview of the process by which we determine the price of our market data. Internally to Nasdaq, the market data fees are reviewed by the Finance Committee,[5] and then submitted for Board approval. The Board's membership consists of representatives from small and large broker/dealers, issuers, and an individual investor organization. Fifty percent of the Board consists of non-industry directors who have no material affiliation with a broker/dealer. In sum, the internal review process is comprehensive, inclusive, and considers the views of each major Nasdaq constituent group that would be affected by fee changes. Approval of new or changed fee structures also requires the consent of the UTP Operating Committee. Each of the exchange members of the UTP Operating Committee evaluates the proposal internally prior to approving the change using criteria similar to those employed by Nasdaq committee and Board representatives.

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[5] Until January 2001, the Finance Committee was chaired by Paul O'Neill, now the Secretary of the Treasury.

Once the fees are approved by the Board, they are submitted to the SEC for review. That review includes a public comment period, during which time anyone has the right to express his or her views. The SEC considers the opinions collected through the comment period before making its decision. This process is exhaustive, but it ensures that the SEC's decision fully reflects the views of all interested parties. Consistent with our approach to compete by making our quality market data broadly available, our most recent market data pricing decisions have been to lower fees or offer new pilot programs with lower fees, so the overall SEC approval process has been expedited.

Nasdaq believes that the process of NMS plan governance, including determinations of market data fees, should be just as inclusive. In this regard, we have recommended to the Seligman Committee that ECNs, alternative trading systems, market makers, specialists, other broker-dealers, investors, and market data vendors should have a voice in the operation of any NMS plan, bearing in mind, however, that it is inconsistent with Section 11A(a)(3)(B) of the Exchange Act, to allow non-SROs to participate directly in NMS plan governance. Nasdaq believes that appropriately constituted advisory committees would provide an excellent forum for non-SROs to offer their views. Nasdaq envisions that such advisory committees would be afforded the opportunity to comment on all aspects of NMS plan governance, including important decisions on market data fees, and that those comments would be required to be duly reflected in subsequent public filings or notices submitted to the SEC.

Transparency of Market Data Terms and Conditions

Once the fees are established, we provide open access to the pricing of our market data as well as the terms and conditions under which our market data vendors and data users (traders and investors) can gain access to our market data. In 1996, Nasdaq launched a web site, named

NasdaqTrader.com, with an express goal of communicating openly and frequently to buy-side and sell-side professionals as well as to market data vendors and their customers.[6] The site includes the price of each market data service, the agreements for vendors and their subscribers, the Nasdaq market data policies, and a wealth of general information on market data. As an SRO, we understand the importance of communicating openly and objectively about our prices and policies to market constituents. Because Nasdaq is charged with ensuring that its data is provided to all distributors on a non-discriminatory basis, the standard contracts and policies provided on NasdaqTrader.com are representative of the contracts and policies in effect with each market data distributor. On average, the site receives 76,626 daily page views, 10,648 daily visits, and 7,110 daily visitors.[7] Industry professionals and market data vendors view it as the premier site to receive information vital to the business they conduct through Nasdaq.

We have also actively participated in the Financial Information Services Division of the Software & Information Industry Association, including its efforts to create a database of market data prices and terms and conditions across U.S. and global markets. We believe that private sector initiatives, such as this, further the goal of broadening access to market data.

Market Data Fees and Users

Throughout the fee setting process, Nasdaq has, at the forefront of its thinking, the desire to increase access to this data among public investors. In that vein, we have taken numerous proactive steps to lower the cost of access to our market data in recent years. In fact, Nasdaq has

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[6] Even before this web site was built, Nasdaq published its market data fees in marketing publications, and made the information available over the phone. Additionally, any party wishing to get a copy of Nasdaq's market data agreements simply had to contact Nasdaq by phone and request them.

[7] Data provided reflects average daily site statistics for February 2001.

been an industry leader in reducing the market data fees for non-professional[8] investors in response to a changing market environment, and has instituted only one minor price increase in the professional data fees in the past seven years.[9] In 1999, as the growth of the Internet and success of online trading was starting to be realized, Nasdaq established a pilot program to drop by 50% the fees paid by, or on behalf of, individual investors for NBBO and last sale data. The monthly user fees were reduced from $4 to $2, while the per-query[10] rate for this data was lowered from $0.01 to $0.005. In 2000, after examining the continued growth of online investing and general interest in Internet-based data services, Nasdaq took the further step of extending the pilot program and dropping the non-professional monthly fee by another 50% from $2 to $1. Additionally, in 2000, Nasdaq established a new pilot program to introduce a non-professional rate of $10 per month per user for its detailed real-time market data, consisting of the individual quotes for each market participant in each Nasdaq-listed security. This data provides individual investors with affordable access to market depth information that will be increasingly useful in a decimal-based market.

All our efforts to make data more affordable and available, and yet continue to retain the value of that market data to support Nasdaq's market and regulatory operations, have directly benefited individual investors, who now enjoy even broader access to market data. A recent

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[8] Non-professional market data rates are available to those investors who are not acting as a professional broker or dealer or otherwise using data for a business purpose.

[9] In 1997, Nasdaq increased the professional rates from $19.00 per month per device to $20.00 per month per device in response to the increased level of information and accompanying cost resulting from the introduction of the SEC Order Handling Rules.

[10] A query is defined as a request to receive the real-time NBBO and last sale information on a specific individual Nasdaq-listed security. For example, if an investor logs onto a web site that offers real-time data and requests the quote for Microsoft Corporation at 10:10:30 AM, that investor will receive the best bid and the best offer information, the last sale price, and the cumulative volume in Microsoft as of 10:10:30 AM. That web site will then log a single query and will be liable to pay the prevailing per-query rate.

research report produced by CS First Boston[11] indicates that major online brokerage firms have nearly 29,000,000 customer accounts. Nasdaq believes that the vast majority of those customers have direct access to Nasdaq market data either through their broker or though a commercially available market data service. Nasdaq has agreements with 320 real-time market data vendors, 371 delayed market data vendors,[12] and 345 broker/dealer firms that act as internal distributors of Nasdaq market data. There are over 550,000 professional users of Nasdaq data, and millions of non-professional users. We are proud of our record of service to these customers.

Conclusion

On behalf of the Nasdaq Stock Market, I would like to thank this Subcommittee for the opportunity to testify on a topic that is at the core of Nasdaq's market. Nasdaq's role as a market cannot be decoupled from its responsibilities as an information provider. All of Nasdaq's efforts to improve its market structure, including SuperMontage, positively impact the quality and depth of information that it can provide to the marketplace. Therefore, the creation of an environment where competing exchanges can compete openly on the value of their market data, within the context of the SEC's oversight, is critical to the future success of the Nasdaq Stock Market. Nasdaq is dedicated to distributing its data to a broad population of investors. We believe that a competitive environment will drive innovation in the creation of new data streams to benefit investors and will ensure that markets have continued incentive to distribute basic and enhanced market data broadly.

Thank you for the opportunity to testify, and we look forward to working with you as you continue to consider the various aspects of the market data issue. I will be happy to answer any questions that you may have.

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[11] *See* Credit Suisse First Boston, *Online Brokerage Quarterly Roundup: December Quarter 2000*, March 8, 2001, James Marks, Art Bender, Sam John.

[12] Nasdaq offers 15-minute delayed market data for free. Vendors wishing to distribute delayed data exclusively (no real-time data operation) enter into a separate agreement and pay a nominal annual fee of $250 plus network costs.

EXHIBIT 1

NASDAQ
An NASD Company

Nasdaq Market Data Quality Control

Market Structure

- Market makers' commitment of capital and obligation to honor their continuous two-sided quotations and the resulting continuous liquidity and transparency of prices enhance investor trust in our market information
- Nasdaq's open architecture encourages ECNs to provide additional liquidity and transparency
- Requirements for reporting within 90 seconds of trade enhance value of last sale information to investors and securities professionals

Regulatory Oversight & Enforcement

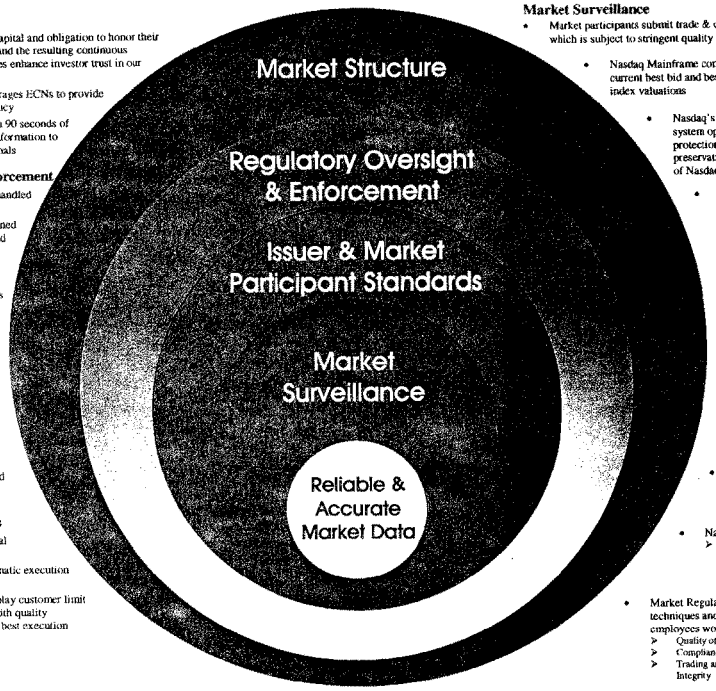
- Regulation of Nasdaq market is handled by NASD Regulation, Inc.
- Unusual trading activity is examined for evidence of insider trading and market manipulation
- Periodic examination of market makers to ensure they are in compliance with all relevant rules and practices
- Disciplinary actions (e.g., fines, bars, expulsions)

Quality Issuers

- Nasdaq attracts and retains quality companies
- Issuers are subject to outside director and shareholder protection rules
- Investors have confidence that Nasdaq-listed issuers have met stringent listing requirements and are monitored to ensure they continue to meet listing criteria

Quality Market Participants

- Market makers must meet special capital & other requirements
- Commitment to providing automatic execution for small investors' orders
- Commitment to protect and display customer limit orders and provide customers with quality executions consistent with their best execution obligations



Market Surveillance

- Market participants submit trade & quote data into Nasdaq, which is subject to stringent quality control review
  - Nasdaq Mainframe computers process the current best bid and best offer, last-sale and index valuations
    - Nasdaq's MarketWatch surveillance system operates in real-time to ensure the protection of investors and the preservation of the integrity and fairness of Nasdaq
      - Nasdaq StockWatch conducts real-time surveillance of issuer activity
        - Continually reviews press releases by Nasdaq companies for material news and monitors price and volume activity real-time
      - Nasdaq TradeWatch monitors trading activity in real time
        - Monitors automated detection systems and reviews alerts to ensure accuracy of price and volume information reported by market participants
        - Resolves locked/cross markets and real-time trade reporting issues
      - Nasdaq Surveillance Delivery Real-Time system analyzes market information and tracking and classifying alerts
      - Nasdaq Market Operations
        - Assesses whether to break clearly erroneous trades
        - Coordinates with firms involved
      - Nasdaq Market Data Server
        - Processes every piece of data from both MarketWatch and Market Operations and routes such data to each relevant regulatory system
  - Market Regulation uses sophisticated surveillance techniques and programs through over 160 employees working in 3 operational units:
    - Quality of Markets
    - Compliance and Surveillance
    - Trading and Market Making Examination/Market Integrity

EXHIBIT 2

The Nasdaq Stock Market

New Approaches to Market Information

Submission to the SEC Advisory Committee on Market Information

February 19, 2001

Introduction

The market structure for the collection and dissemination of market information that has evolved in the wake of the Securities Act Amendments of 1975 ("1975 Amendments")[1] has served the markets and the investing public well over the course of the last quarter century. It has played a key role in the dramatic expansion of our securities markets, particularly the over-the-counter markets. Naturally, any market structure requires adjustment to keep pace with change. No matter how well suited the SEC's and the markets' response to Congress' mandate in 1975, Nasdaq agrees that it is appropriate now to consider alternative approaches to market information as our markets move into a new phase.

We are looking to this next phase with great excitement as we recently celebrated the 30th anniversary of Nasdaq's commencement of operations on February 8, 1971. We are now proceeding with our plans to develop an integrated order display facility – SuperMontage℠[2] – that will form the backbone of our market as we transform Nasdaq into a national securities exchange.[3] With this in mind, we would like to review briefly the role and contribution of Nasdaq, as an exclusive processor and consolidator of market information, its operational reliability, and its leadership in reducing market information fees.

Nasdaq has effectively performed the function of an exclusive processor consistent with Congress' vision of a national market system ("NMS").[4] For the last dozen years, Nasdaq has performed this function by collecting, processing, and disseminating last sale and quotation information while

[1] Pub. L. No. 94-29, 89 Stat. 97 (June 4, 1975). *See also* S. Rep. No. 75, 94th Cong., 1st Sess. 8 (1975); H.R. Rep. No. 229, 94th Cong., 1st Sess. 92 (1975).

[2] Exchange Act Release No. 43863 (January 19, 2001) ("SuperMontage Approval Order").

[3] Nasdaq is not currently registered as a national securities exchange, although it is in the process of registering as such. Accordingly, the views expressed in this white paper on the future structure of market information contemplate that Nasdaq's role in such future structure will be that of an exchange.

[4] As discussed below, Nasdaq intends to relinquish its role as exclusive processor with respect to market information for Nasdaq-listed securities traded pursuant to the Nasdaq/NMS/UTP Plan.

operating, for its own market and members, an inter-dealer quotation system and order-routing and execution services, such as the SelectNet Service and the Small Order Execution System. In addition, Nasdaq has participated, on behalf of the National Association of Securities Dealers, Inc. ("NASD"), in the Intermarket Trading System ("ITS") Plan with respect to linking OTC market makers trading exchange-listed securities to ITS (through the NASD's Computer Assisted Execution System).

Nasdaq's internal trading facilities and exclusive processor function have been extremely reliable, even with the explosive growth in Nasdaq trade and share volume and quotation message traffic over the course of the last few years (growth that far exceeds that of any other market). In 2000 alone, Nasdaq's average daily trading volume exceeded 1.7 billion shares, representing 70% growth over 1999. In addition, quote volume for 2000 exceeded the one billion-quote mark (1.235 billion quotes), surpassing quotation message traffic for 1999 by 103%. Despite this explosive growth, Nasdaq's operational reliability record has been exemplary, remaining fully operational 99.972% of market hours in 2000.

Nasdaq has also been an industry leader in reducing market information fees in response to a changing market environment. For example, on April 1, 1999, Nasdaq began a one-year pilot pricing program for non-professional users that reduced the per query fee from $0.01 to $0.005, and the non-professional user fee from $4.00 to $2.00 per month.[5] The pilot was extended last April, and Nasdaq further reduced the non-professional user fee from $2.00 to $1.00 per month.[6] Nasdaq commenced a one-year pricing pilot program on September 1, 2000, reducing the Nasdaq Quotation Dissemination Service ("NQDS") fee for non-professional users from $50 to $10 per month.[7] These fee reductions have directly benefited individual investors, who now enjoy even broader access to real-time market information.

Nasdaq has also worked with other markets to facilitate their trading of Nasdaq-listed securities pursuant to unlisted trading privileges ("UTP").[8] In the context of the Nasdaq/NMS/UTP Plan, Nasdaq has served as the Plan Processor and has performed that role fairly and to the general satisfaction of the other Plan participants. We are mindful of the fact, however, that the Nasdaq/NMS/UTP Plan, in its current form, is not a long-term solution to the difficult market structure issues facing the Advisory Committee. When the Plan was approved on a pilot basis in 1990, it served a specific purpose for a limited number of participants – namely Nasdaq and the Chicago Stock Exchange, Inc. (the "CHX") – which negotiated the Plan at arm's length in a very different market environment than exists today. We recognize that the Plan will require a significant overhaul to address the characteristics of today's market

[5] Exchange Act Release No. 41499 (June 9, 1999).

[6] Exchange Act Release No. 42715 (April 24, 2000).

[7] Exchange Act Release No. 43190 (August 22, 2000). NQDS is a service provided by Nasdaq that provides a continuous stream of quotation information that allows market data vendors to create displays similar to Nasdaq's Workstation II.

[8] To date, only the Chicago Stock Exchange, Inc. has participated in the Nasdaq/NMS/UTP Plan in a meaningful way.

environment and the needs of new participants. Based on our positive and mutually-beneficial dealings with the CHX, which has played a vital role in the Plan's development and success, we are confident that with the help of existing and new Plan participants, the new Nasdaq/NMS/UTP Plan, which Plan participants are now developing, will advance the objectives of a NMS even further.

As Nasdaq pursues its registration as a national securities exchange and implements SuperMontage, we believe now is an appropriate time to analyze our current market structure and consider possible alternatives for the collection, processing, and dissemination of last-sale and quotation information that would preserve the goals and concepts of a NMS, while encouraging competition among data processors and promoting the interests of investors. We discuss our thinking on the subject and each of our proposals in greater detail below. Part I discusses our recommended approach to considering alternatives, including Nasdaq's conceptual views on how the framework for market information should be adjusted to strike a more fitting balance between regulation and competition. In Part II, we lay out our two recommended alternatives, the "market choice" alternative and the "single consolidator" alternative, including each alternative's advantages and related considerations. Finally, in Part III, we briefly describe our perspective on inter-market linkages, a subject that is admittedly beyond the scope of the Advisory Committee.

I. Recommended Approach to Considering Alternatives

As we proceed to consider what approaches to market information make sense in today's market environment, we should recognize that the dramatic growth in our securities markets has not occurred through serendipity. Rather, the framework created by Congress in 1975 for the development of a NMS was crafted with sufficient flexibility to allow regulators and market participants to devise reasoned responses to the difficult market structure issues we face today.

In particular, the 1975 Amendments have allowed the SEC, the national securities exchanges, and the NASD to pursue expansion vigorously within the framework set out by Congress. In addition, the core policy goals established by Congress in 1975 – including broad public access to consolidated market information, the maintenance of stable and orderly markets, and the ability to promote competition – have never been more important than they are today. Nasdaq believes that the alternatives proposed in this white paper, would not only preserve and enhance these policy goals established by Congress in 1975, but could also be achieved within the same statutory framework.

Before setting forth our recommended alternatives, we think it is worthwhile to present briefly our perspective on the framework Congress established in 1975 and discuss whether the application of that framework continues to strike an appropriate balance between regulation and competition. Congress

sought to balance its desire to allow competition to shape a NMS with an understanding that, in the environment of the 1970s, SEC involvement would be needed to achieve the goal of providing investors and broker-dealers with consolidated market information. Specifically, Congress recognized that competition might not be sufficient to ensure the automated dissemination of consolidated market information that would form the heart of a NMS. Accordingly, Congress gave the SEC "pervasive rulemaking power to regulate securities communications systems."[9] Using this authority, the SEC adopted a number of rules under which the exchanges and SROs (collectively, "exchanges") have been required to act jointly in disseminating market information. It is under this regulatory framework that the exchanges have acted jointly to develop and fund systems that successfully disseminate a highly reliable, real-time stream of consolidated market information throughout the U.S. and the world.

The success of this endeavor has been a testament to the concerted efforts of Congress, the SEC, the exchanges, the NASD, and the securities industry as a whole. But, this success is also due to the high quality of market information created by the exchanges and the NASD at substantial initial and ongoing expense. As the SEC observed in its December 1999 concept release on market data,[10] the value of a market's information depends on the quality of the market's operation and regulation.

> Information is worthless if it is cut off during a systems outage (particularly during a volatile, high-volume trading day when reliable access to market information is most critical), tainted by fraud or manipulation, or simply fails to reflect accurately the buying and selling interest in a security. Consequently, there is a direct connection between the value of a market's information and the resources allocated to operating and regulating that market.[11]

Moreover, the role of SRO-operated markets is an integral component of the proper functioning of a NMS, and without their participation, market information simply would have no value whatsoever. Rather than viewing market information as just a by-product of trading activity, it more appropriately should be viewed as the foundation of their role as "markets." In particular, such markets actively bring together order, quote, and last sale information and provide transparency in a manner that drives the interaction and execution of orders. Because SRO-operated markets provide this functionality so effectively, broker-dealers actively seek out our markets to provide quality executions for their customers' trading interest.[12] No matter where one stands on the question of who owns market information,[13] the

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[9] H.R. Rep. No. 229, *supra* note 1, at 93.

[10] *See Regulation of Market Information Fees and Revenues*, Exchange Act Release No. 42208 (December 10, 1999) ("SEC Market Data Concept Release").

[11] *Id.* at Section I.

[12] *See* Sharon Brown-Hruska and Jerry Ellig, *Financial Markets as Information Monopolies*, 23 REGULATION, at 31.

[13] Nasdaq has long maintained that its market data is proprietary to Nasdaq and has taken steps to protect its proprietary interest in this data. *See Prepared Statement of Dean Furbush, NASD Chief Economist and Senior Vice President, before the House Subcommittee on Finance & Hazardous Materials* (June 30, 1999).

costs borne by SROs and the benefit to investors, amply justify their entitlement to collect and disseminate this information and to be compensated for it.

The evolution of a NMS, however, has come at an expense beyond the costs of establishing and operating the various NMS market information plans. As we describe below, we believe that a structure that compels independent markets to act jointly, rather than competitively, in disseminating market information is no longer warranted in today's securities markets and, in fact, impedes both competition and innovation. With this premise in mind, we believe that the alternatives described below strike a balance between regulation and competition that is more appropriate to today's market environment.

Nasdaq believes that certain key considerations should guide the Advisory Committee as it analyzes alternative market structures for market information that improves the balance between regulation and competition. In particular, Nasdaq urges that the Advisory Committee consider the following when evaluating alternative approaches in this area:

- ***Competition.*** Restrictions on competition in the area of market information should be reduced or eliminated insofar as is practical and consistent with the public interest, especially those restrictions that – however suited to the 1970s – no longer make sense in today's market environment. This should be accomplished either by limiting the compulsory nature of joint NMS plan participation (for example, by creating alternatives to compulsory participation) or by limiting the scope of compulsory participation to what is necessary to accomplish the purposes of the 1975 Amendments and leaving the rest to competitive forces.
- ***Transparency.*** No alternative approach should undercut the principle that basic market information – last sale and consolidated best bid, best offer and aggregate size (*i.e.,* NBBO) information – must be readily available to all market participants and investors alike. Even with the advent of decimalization, the NBBO remains a critical element of market information that should be available through appropriate application of Rule 11Ac1-2 (the "Vendor Display Rule") under the Securities Exchange Act of 1934, as amended (the "Exchange Act").
- ***Fair and Reasonable Access to Last-Sale and Quotation Information.*** Each exchange should continue to provide last sale and best bid, best offer and aggregate size information ("BBO") to market data vendors (or plan processors) on fair and reasonable terms and on a non-discriminatory basis.
- ***Integrity of Market Information.*** Any entity responsible for collecting, processing, or distributing last sale and BBO information – be it an exclusive processor or other market data vendor – must have sufficient operational capability to perform these functions in a timely, accurate, and reliable manner so as to ensure the highest quality and integrity of market information.
- ***Giving Non-SROs a Voice.*** Nasdaq believes non-SROs – such as electronic communications networks ("ECNs"), alternative trading systems ("ATSs"), market makers, specialists, other broker-dealers, investors, and market data vendors – should have a voice in the operation of any NMS plan, bearing in mind, however, that it is inconsistent with Section 11A(a)(3)(B) of the Exchange Act, to allow non-SROs to participate directly in NMS plan governance. Nasdaq believes that appropriately constituted advisory committees would provide an excellent forum for non-SROs to offer their views. Nasdaq envisions that such advisory committees would be afforded the opportunity to comment on all

aspects of NMS plan governance and that those comments would be required to be duly reflected in subsequent public filings or notices submitted to the SEC.[14]

II. Our Proposed Alternatives

Below, we propose two possible alternatives for modifying the current data dissemination framework. Although we believe that either approach would strike an appropriate balance between regulation and competition in a way that is more appropriate to today's environment, our first alternative – the "market choice" alternative – is the alternative that Nasdaq strongly prefers. The market choice alternative would allow each exchange to ***choose*** whether to: (a) participate in a NMS plan governing last sale and quotation information for the participating exchanges through the facilities of the plan's exclusive processor; or (b) not participate in a NMS plan and separately make its information available to any number of non-exclusive or competing processors (more commonly referred to as "market data vendors").

Under the market choice alternative, one or more market data vendors would collect, process, and consolidate the last sale and BBO information from each exchange for each covered security and determine the NBBO for the security. In turn, such market data vendors would make the consolidated information available to other market data vendors, broker-dealers, and end users. Under this alternative, the exchanges (including Nasdaq upon its registration as an exchange) would be required to make available to all market data vendors only their respective last sale and BBO information, and could negotiate separately for the sale of that information plus enhanced information – such as the full depth of their respective books – to market data vendors, broker-dealers, and subscribers.

The second alternative – the "single consolidator" alternative – would contemplate the creation of a universal exclusive processor ("Single Consolidator") administered by the participants of the associated NMS plan and subject to SEC oversight. The Single Consolidator would operate, in essence, as a public utility whose limited function would be to consolidate BBO and last sale information (and ***only*** last sale and BBO information) from each plan participant, to sequence and validate that information, and to make it available on behalf of the associated NMS plan to market data vendors, broker-dealers, and end users.

Under the single consolidator alternative, each exchange would be required to make available its last sale and BBO information to the Single Consolidator. Each exchange would be free to separately make enhanced information available to market data vendors and subscribers. To encourage competition and innovation among markets and market data vendors, the collection and dissemination of such enhanced information would be beyond the limited role of the Single Consolidator. In other words, the

[14] We urge the Consolidated Tape/Quotation Association ("CTA/CQ") and ITS to adopt this approach, as we intend to propose such a structure for the Nasdaq/NMS/UTP Plan.

Single Consolidator would not collect or disseminate enhanced information. Market data vendors would be able to obtain separately the BBO information from the Single Consolidator or directly from each exchange (for example, as part of their enhanced information), and make such information available to other market data vendors, broker-dealers, and end users.

A. Market Choice Alternative

Nasdaq agrees with those in the industry who believe that, ultimately, exchanges should not be compelled to participate in joint-SRO NMS plans ("NMS plans") and provide market information to a single, exclusive processor, but instead should be permitted to provide this market information to competing market data vendors.[15] The market choice alternative best promotes the goal of allowing markets and market data vendors to provide the most valuable and useful data to market participants and investors. In this model, each exchange would have discretion either to: (a) participate in a NMS plan governing the collection, processing, and dissemination of last sale and BBO information for the participating exchanges through the facilities of the plan's exclusive processor; or (b) not participate in a NMS plan and separately make its data available to any market data vendor. If an exchange opted to participate in a NMS plan with one or more other exchanges, the terms of the joint plan would dictate the plan's operation, much like today. On the other hand, if an exchange determined that it could more efficiently generate and disseminate useful market information outside a mandated structure, it would be free to independently establish and collect fees for its market information and enter into and administer its own contracts governing market information. Under the market choice alternative, there could be more than one plan and/or consolidator for Nasdaq-listed securities, each with its own rules, requirements and governance structure. For example, a group of SROs could enter into a NMS plan covering Nasdaq-listed securities, while another group of SROs could enter into a separate NMS plan (which presumably would have different rules and requirements) governing the same securities.

In any event, exchanges would be required to make available their respective last sale and BBO information to all market data vendors.[16] However, exchanges could negotiate separately the sale of enhanced information to their subscribers and other market data vendors. In addition, Nasdaq believes it is imperative that, consistent with the Vendor Display Rule, each market data vendor that claims to publish the NBBO be required to obtain the last sale and BBO information from ***each*** market and consolidate and disseminate such information when making enhanced information available to other

[15] *See, e.g.*, Letter from Robert G. Britz, Group Executive Vice President, New York Stock Exchange, Inc. ("NYSE") to Mr. Joel Seligman, Dean and Ethan A.H. Shipley University Professor, Washington University School of Law, dated December 1, 2000 ("NYSE Submission").

[16] Each exchange and the NASD would be subject to Exchange Act Rules 11Aa3-1 (the "Tape Rule") and 11Ac1-1 (the "Quote Rule") governing the reporting and dissemination of last sale and BBO information, respectively.

market data vendors, broker-dealers, and end users that subscribe to the market data vendor for such market information.[17] Although Nasdaq agrees with other members of the Advisory Committee that decimalization of the securities markets may lessen the utility of the NBBO somewhat, for the reasons discussed below this does not warrant abandoning the Vendor Display Rule.

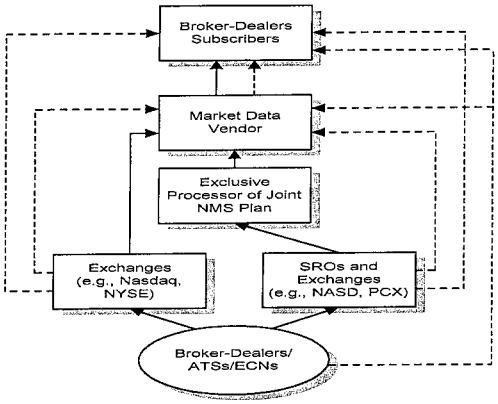
Under the market choice alternative, Nasdaq likely would choose not to participate in a NMS plan, but to act as its own processor and collect, process, and make available last sale and BBO information available for Nasdaq-listed securities traded through the Nasdaq Stock Market. Nasdaq, however, may consider creating a NMS Plan with other exchanges that trade Nasdaq-listed securities through SuperMontage or their respective exchanges.

For the purposes of this discussion, however, Nasdaq, as its own processor, would make this BBO information available to any and all market data vendors on a fair and non-discriminatory basis. Market data vendors would, in turn, collect, process, and consolidate Nasdaq's last sale and BBO information and the other markets' last sale and BBO information for a particular security and determine the NBBO for the security. Market data vendors would make available the consolidated information to other market data vendors, broker-dealers, and end users. Each market data vendor that assumes this role as a consolidator of market information, would be responsible for assuring that it has sufficient systems capacity to receive and process all of the exchange, SRO, and NMS plan processor data feeds (as applicable).

Figure 1 illustrates the basic structure of the market choice alternative. The solid lines represent the required provision of last sale and BBO information, and the dotted lines represent the voluntary provision of enhanced information.

[17] The Advisory Committee should consider whether current exceptions to, or exemptions from, the Vendor Display Rule (*e.g.*, the publisher's exclusion to the definition of SIP) adequately permit or should further encourage the dissemination of enhanced information. Recognizing that the NBBO is a fundamental point of reference in our securities markets – to the extent that the NBBO is easily accessible by investors through another delivery channel particularly when placing orders – perhaps the strict application of the Vendor Display Rule is not necessary in all cases. For example, Island, Archipelago, and the Internet portal Yahoo! each has developed innovative tools to allow the investing public access to enhanced information. Provided that investors are informed that such information does not necessarily include the NBBO, and the NBBO is reasonably available through other means, we do not believe allowing markets to disseminate this enhanced information without also including the NBBO compromises investor protection.

Figure 1
Market Choice Alternative



1. Advantages of the Market Choice Alternative

The market choice alternative unleashes competitive forces in a variety of ways. First, this model encourages competition on an inter-market level. Second, it encourages competition among market data vendors seeking to become consolidators of market information.

The market choice alternative offers a market-based solution that would end joint pricing and the so-called "inter-exchange subsidies," and would promote further competition in the market data arena. To the extent that the value of one market's information is greater than the value of another market's information, today's NMS plans effectively subsidize markets that contribute less valuable information.[18] The market choice alternative would create incentives for the markets that now depend on inter-exchange subsidies to innovate by quoting more competitively and providing enhanced execution and other services to their members and their members' customers, thereby increasing the value of their market information.

[18] The SEC has questioned whether the revenue received by the regional exchanges exceeds the value of their data. *See* SEC Market Data Concept Release, *supra* note 10.

Market data vendors would have incentives to compete in this space on many different levels – not just based on price. In addition to price competition, the market choice alternative would create incentives for market data vendors to improve on existing technology to collect market information from exchanges, and to develop innovative market information consolidation and dissemination products and services for broker-dealers and end users.

Congress has recognized the importance of competition in the development of a NMS. In particular, the legislative history of the 1975 Amendments states that "the fundamental premise of the bill is that the initiative for the development of the facilities of a national market system must come from private interests and will depend upon the vigor of competition within the securities industry as broadly defined."[19] We believe that the competitive framework set forth in the market choice alternative embodies this "fundamental premise" of the 1975 Amendments.

In addition, the market choice alternative separates the market function from the SIP function, allowing exchanges to compete as "markets" and make decisions on internal market matters independent of those within the purview of the processor. In this regard, Nasdaq has been hampered by its role as the processor for the Nasdaq/NMS/UTP Plan because the Plan does not clearly distinguish Nasdaq's role as a consolidator of quote and trade information from all markets and OTC market makers that trade Nasdaq-listed securities, from the functions served by Nasdaq as the operator of The Nasdaq Stock Market. Although Nasdaq believes that UTP exchanges have been treated fairly under the Plan, Nasdaq agrees that this dual processor/market role has created difficult and unique issues in administering the Plan and has hampered Nasdaq's ability to innovate and compete as a market – unencumbered by its obligations as a SIP.

The market choice alternative would permit the exchanges – as true competitors – to "opt out" of unwieldy NMS plans. The goals of a NMS are unassailable – to provide consolidated last sale and BBO information to market participants and investors – thus providing greater transparency for the benefit of the investing public. Not surprisingly, governance of these plans is extremely cumbersome, due to the fact that the plan participants are competitors seeking to advance their own respective commercial interests, which often are antithetical to those of other participants. The plans compel participants to agree (often by unanimous vote) on terms that often benefit certain participants at the expense of others. Naturally, this leads to disputes among the plan participants, which can be time-consuming and expensive to resolve. For example, the SEC was recently asked to referee a dispute between The Cincinnati Stock

[19] S. Rep. No. 75, *supra* note 1, at 12.

Exchange and the CTA over fees for market information display devices located off of the exchange "floor."[20]

Moreover, it is widely recognized that joint NMS plans under the existing structure could hinder competition among plan participants. For example, in 1997, the SEC sent a letter to the ITS participants outlining four aspects of the ITS Plan that the SEC considered anti-competitive and requesting that ITS participants develop reasonable recommendations to the SEC in the form of proposed ITS Plan amendments and proposed SRO rule changes.[21] Additionally, the SEC and the Antitrust Division of the Department of Justice recently settled proceedings against four options exchanges in which it was alleged that a decision taken by such exchanges, pursuant to the OPRA Plan, to limit the capacity of OPRA effectively constrained multiple trading in certain options classes.[22] The market choice alternative is designed to limit the potential for such conduct.

Finally, the market choice alternative should reduce the cost of market information. Economic theory holds that true competition among market data vendors should result in lower market information fees as vendors compete to sell consolidated information to other vendors, broker-dealers, and end users. Under this theory, lower information costs to broker-dealers, should be passed along to investors, through lower commissions and other costs. Moreover, as more fully described below, the board of directors of each exchange (which maintains equal representation of public members) would need to approve any fee increases, and Section 19(b) of the Exchange Act would provide the SEC appropriate oversight of such fee changes.

2. *Complexities Associated with the Market Choice Alternative*

Although Nasdaq believes that by introducing greater competition to the market information arena the market choice alternative represents the ideal model, there are several issues that must be resolved before this approach could be implemented. As described below, the Advisory Committee should address (1) the level of SEC oversight necessary in certain respects (*e.g.*, market data vendors'

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[20] *See* Exchange Act Release No. 43316 (September 21, 2000) (Order Accepting Jurisdiction, Establishing Procedures, and Ordering Briefs).

[21] *See* Letter from Jonathan G. Katz, Secretary, Commission, to ITS Participants, dated May 27, 1997. In this letter, the SEC found the following four elements of the then current operation of ITS and the ITS Plan to be an unreasonable impediment to competition among the various markets: (1) minimum increments for ITS commitments; (2) the lack of access to ITS for OTC market makers; (3) the unanimous vote requirement for ITS Plan amendments; and (4) the ITS Participants' special right of review of The Cincinnati Stock Exchange ("CSE") proposed rule changes. The unanimous vote requirement for ITS Plan amendments and the special right of review of CSE rule changes still remain today.

[22] *See United States v. American Stock Exchange et. al.*, No. 1:00CV02174 (D.D.C filed September 11, 2000); *In the Matter of Certain Activities of Options Exchanges*, Exchange Act Release No. 43268 (September 11, 2000); Administrative Proceeding File No. 3-10282. As part of this settlement, the exchanges agreed to amend the OPRA plan to modify the structure and operation of OPRA so that each exchange will independently determine the amount of data transmission capacity that it needs to obtain.

operational capabilities and exchange market information fees); and (2) the potential redundancies associated with the market choice alternative.

As described above, market data vendors would be responsible for collecting last sale and BBO information from various market centers, and consolidating and disseminating such information. While we believe that competitive forces will ensure that market data vendors perform this consolidator function in a manner consistent with the objectives of a NMS, the Advisory Committee should consider whether such market data vendors should be required to register as SIPs pursuant to Section 11A(b)(1) of the Exchange Act. Market data vendors that choose to become consolidators of market information will have to possess the necessary technology to ensure that the data they produce is accurate and timely.[23] The SEC could also impose certain basic notice, reporting, or other requirements[24] on such market data vendors in order to perform effectively its oversight responsibilities. Should a market data vendor that is registered as a SIP not comply with the minimum standards established by the SEC, the SEC could censure, place limitations on, or suspend or revoke the market data vendor's registration.

Another issue for the Advisory Committee to consider in connection with the market choice alternative is the extent to which the SEC would need to review data fees charged by the individual market centers. Sections 11A and 19(b) of the Exchange Act provide the SEC with the means to implement effective oversight of market data fees.[25] For example, because the Vendor Display Rule requires market data vendors to disseminate consolidated last sale and BBO information, they would have to obtain data feeds from each market. If a particular market attempted to use the leverage created by the Vendor Display Rule to insist on excessive fees for its market information, the SEC would be able to review such practices pursuant to Sections 11A and 19(b) of the Exchange Act.[26] Moreover, the Exchange Act provides the SEC with rulemaking authority to ensure that all SIPs (*i.e.*, market data

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[23] Nasdaq is encouraged by the optimism of other members of the Advisory Committee that "today's technology permits multiple entities to receive simultaneously multiple streams of data and to create consolidated outputs that sequence prices and quotes in the same order." *See* NYSE Submission, *supra* note 15. While Nasdaq shares this view, we believe that the Advisory Committee should focus on potential obstacles to accurate sequencing of prices and quotes (*e.g.*, varying trade reporting rules among exchanges, lack of uniformity in the speed of data dissemination from an exchange to a market data vendor acting as a consolidator of market information).

[24] In addition, the SEC may consider whether it is necessary to require market data vendors to agree upon uniform systems capacity requirements and common communication standards or protocols with respect to the collection, processing, and dissemination of market information.

[25] The SEC currently reviews fees charged by the various NMS plans, pursuant to Section 11A of the Exchange Act, and must make a finding that the proposed fee is consistent with the purposes of the Exchange Act. Indeed, in enacting the 1975 Amendments, Congress created this role for the SEC as a necessary step in the development of a NMS. In addition, Section 19(b) of the Exchange Act also provides the SEC with effective oversight capabilities in respect of fees proposed by SROs. *See supra* notes 5-7 and accompanying text.

[26] The legislative history of the 1975 Amendments states that "in order to foster efficient market development and operations and to provide a first line of defense against anti-competitive practices, Sections 11A(b) and (c)(1) would grant the SEC broad powers over any exclusive processor and impose on that agency a responsibility to assure the processor's neutrality and the reasonableness of its charges in practice as well as concept." S. Rep. No. 75, *supra* note 1, at 11-12.

vendors) may obtain market information from each exchange, as an exclusive processor, on terms that are "fair and reasonable," and all persons may obtain market information on terms that are not "unreasonably discriminatory." The Advisory Committee should consider what effect, if any, the market choice alternative would have on SEC resources.

Finally, the market choice alternative may, in the near term, create certain inefficiencies because multiple market data vendors will be consolidating the same data and will be negotiating and servicing more contracts. However, just as competition between the various market centers today creates "inefficiencies" (*e.g.*, multiple venues trading the same securities), we do not believe that the redundancies or costs of such competition outweigh the substantial benefits derived from this inter-market competition. Moreover, we believe that free market principles will ultimately determine the most economically efficient number of market data vendors.

B. Single Consolidator Alternative

Although we strongly prefer the market choice alternative, in response to Dean Seligman's request, we also propose an intermediate step that makes incremental improvements to the existing model. The single consolidator alternative, as described below, could serve as this intermediate step.

The single consolidator alternative builds on the existing market structure by employing an exclusive processor (*i.e.,* Single Consolidator) administered by participants of an associated NMS plan and subject to SEC regulatory oversight. The Single Consolidator would be responsible for processing real-time last sale information and the NBBO. Market data vendors, other than the Single Consolidator, would be able to contract individually with each exchange for enhanced information, which may include the full depth of each market's book. Non-SROs would not be direct participants in the associated NMS plan and would not be able to provide last sale and BBO information directly to the Single Consolidator, but would nevertheless have a voice in NMS plan governance. As described below, Nasdaq believes that an appropriately constituted advisory committee would provide an excellent forum for non-SROs to offer their views.

Under the single consolidator alternative, all market centers that trade a security covered by a NMS plan would be required to submit the last sale and BBO information in real-time to the Single Consolidator associated with the NMS plan.[27] In turn, the Single Consolidator would consolidate and disseminate the BBO of each market, the NBBO and last-sale information downstream. Each market data

[27] The single consolidator alternative contemplates that each plan participant would be required to submit consolidated last sale and BBO information to the Single Consolidator, pursuant to the Tape Rule and the Quote Rule, respectively.

vendor would then be required under the Vendor Display Rule,[28] to obtain and disseminate consolidated last sale and NBBO information from the Single Consolidator when making available more enhanced market information to other market data vendors, broker-dealers, and end users that subscribe to the market data vendor for such market information. Participants in the associated NMS plan would be subject to SEC oversight to ensure appropriate governance, fees, capacity, and accuracy of the NBBO.

Figure 2 illustrates the basic structure of the single consolidator alternative. The solid lines represent the required provision of last sale and BBO information, and the dotted lines represent the voluntary provision of enhanced information.

Figure 2
Single Consolidator Alternative

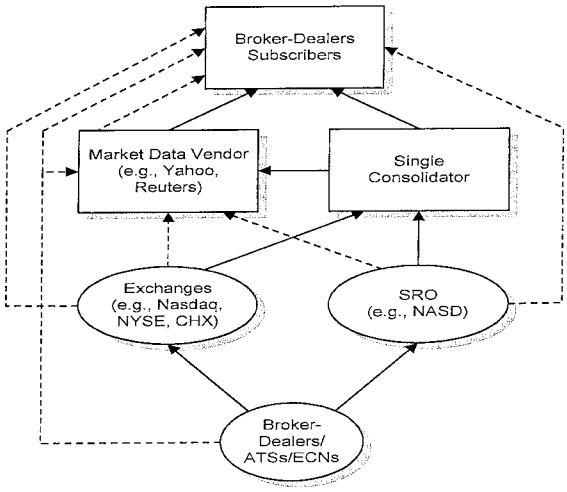
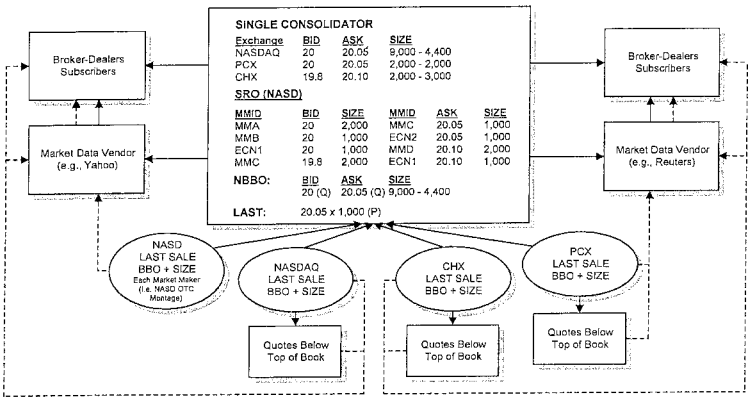


Figure 3 provides a more detailed illustration of the single consolidator alternative. In particular, Figure 3 reflects the specific types of quotation information that the Single Consolidator would collect from each plan participant, and consolidate and disseminate to market data vendors. Again, the solid lines represent the required provision of last sale and BBO information to the Single Consolidator, and the dotted lines represent the voluntary provision of enhanced information (*i.e.,* information below the BBO) to market data vendors.

[28] As noted above, the Advisory Committee should consider whether it is feasible to create certain limited exceptions or exemptions to the Vendor Display Rule to facilitate the dissemination of market data. *See supra* note 17.

Figure 3
Detailed Illustration of Single Consolidator Alternative



1. Advantages of the Single Consolidator Alternative

The single consolidator alternative would provide a framework that preserves the objectives of a NMS, in part, by charging the Single Consolidator with the public utility-like responsibility to calculate and disseminate last sale and NBBO information. The single consolidator alternative also advances the NMS goal of promoting competition by encouraging market data vendors to negotiate separately with each exchange for enhanced information.

From the perspective of the exchanges, the availability of enhanced information below the BBO is a value-added service of each exchange that should be driven by competition and not mandated by SEC regulation. In particular, each exchange, in its role as a market – and without the encumbrance of NMS plans – should have discretion to determine how to make enhanced information available to market data vendors. This discretion would include entering into and administering contracts between exchanges and market data vendors regulating the terms of receipt of this additional information and establishing and collecting charges directly from such vendors.

2. The Single Consolidator's "Public Utility" Role

A fundamental premise of the single consolidator alternative is that the Single Consolidator should ***only*** collect, process, and disseminate complete and accurate consolidated best bid and best offer (*i.e.,* NBBO) and aggregate sizes along with real-time last sale transaction reports and related volume

derived from all participants in the plan governing the Single Consolidator. In turn, the Single Consolidator, on behalf of the plan participants, would be required to make available this information to all market data vendors, broker-dealers, and subscribers on a non-discriminatory basis to ensure that such information can reach all investors. In other words, the Single Consolidator should act, in essence, as a public utility in the dissemination of last sale and NBBO information.

There are significant policy reasons to exclude enhanced information from the domain of the Single Consolidator, while allowing market data vendors to negotiate with each market for enhanced information. In particular, the single consolidator alternative establishes a framework in which: (1) exchanges would be encouraged to innovate and create greater value for their respective markets' services[29]; (2) market data vendors would be encouraged to develop innovative means of consolidating and disseminating such market information; and (3) clear lines would be drawn allowing exchanges to serve their roles as markets by managing the full depth of their books, and allowing the Single Consolidator to serve its role as a quasi-public utility responsible for calculating and disseminating the NBBO and last-sale information.

The NBBO is among the most vital pieces of market information to market participants, including exchanges, broker-dealers, and institutional and retail investors.[30] In the 1972 *SEC Statement on the Future Structure of the Securities Markets,* the SEC recognized, as an integral part of the formation of a NMS, the importance of providing investors with the NBBO "so that buyers and sellers of securities, wherever located, can make informed decisions and not pay more than the lowest price at which someone is willing to sell nor sell for less than the highest price at which a buyer is prepared to offer."[31] A reliable and widely disseminated NBBO ensures that customers are informed of the best prices and sizes available in the constituent exchanges. In addition, the NBBO assists broker-dealers in complying with applicable rules and regulations, including compliance with their short sale and best execution obligations. The NBBO will continue to be important in a decimal trading environment, as a reflection of the best price at which market participants are willing to trade at a single point in time.

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[29] *See* SuperMontage Approval Order, *supra* note 2. Nasdaq will provide, through a feature called NQDS Prime on a real-time basis, all individual attributable quote/order information at the three best price levels displayed in the Nasdaq Order Display Facility. In addition, NYSE recently announced that it proposes to implement "Look at the Book" and NYSE OpenBook, which will offer a real-time view of the replicated NYSE's electronic limit order book. *See* NYSE Press Release, "NYSE Outlines Timeline for Next Generation Products" (October 5, 2000).

[30] *See Market Information: Searching for Consensus,* SEC Commissioner Paul R. Carey, Twenty-Eighth Annual Securities Regulation Institute, January 25, 2001. In his speech highlighting the issues being considered by the Advisory Committee, Commissioner Carey noted that even in a decimal trading environment, "the inability to discover the best prices in the national market would be a major step backward."

[31] Securities and Exchange Commission, *Statement on the Future Structure of the Securities Markets* (Feb. 2, 1972), 37 FR 5286.

In addition, we believe that allowing the Single Consolidator to collect more than the BBO from each market will likely lead to investor confusion and ultimately result in unnecessary SEC rulemaking. If plan participants provided depth of their respective books to the Single Consolidator, while others only provided their BBO, the Single Consolidator would have incomplete information that may mislead or confuse investors. For example, if the stream of information provided by the Single Consolidator provides an incomplete depiction of quotation interest at three minimum increments away from the best market, then such information will not provide any utility to market participants and investors. The SEC may be compelled to propose rulemaking that requires exchanges to make available ***all*** quotation information to the Single Consolidator, or a specified amount of quotation information below the BBO. In either case, such a result would have the effect of dictating the structure of each NMS plan participant's respective market – which runs counter to the objectives of the 1975 Amendments. Moreover, it would limit the opportunities for markets to compete with each other, and, as stated above, it would confuse the Single Consolidator's role as a quasi-public utility responsible for providing market participants and investors with accurate and reliable consolidated last sale and NBBO information.

As trading in decimals expands, there is no disputing that market quotation information below a particular market's BBO becomes increasingly important to exchanges, broker-dealers, and investors alike. Nasdaq believes, however, that the Single Consolidator should not confuse its role as a processor of last sale and BBO information with any enhanced information or, as described below, market-related functions. If the Single Consolidator were permitted to collect from exchanges information other than the last sale and BBO information, it would be performing the function of both market and processor (and would be subject to similar criticism as Nasdaq faces today in the Nasdaq/NMS/UTP context).[32] Rather than requiring, or even permitting, exchanges to make enhanced information available to the Single Consolidator, we believe that the convergence of exchanges' desire to attract interest in their respective markets and market data vendors' ability to develop innovative ways of packaging and disseminating enhanced information will ensure – without Single Consolidator or SEC involvement – that other market data vendors, broker-dealers, and end users will have access to whatever enhanced information suits their respective needs.

[32] This structure would be another step toward the creation of a national consolidated limit order book.

3. *Governance Structure of the Single Consolidator*

NMS plan governance historically has been an extremely contentious issue among plan participants. Because the single consolidator alternative requires the existence of NMS plans,[33] the Advisory Committee must necessarily consider the difficult issues associated with the governance of such NMS plans, including consent governance, revenue and cost allocation, and participation rights.

a. *Consent Governance*

Nasdaq recognizes that establishing equitable voting procedures for NMS plans is not an easy task. Whether a particular action requires unanimous, super-majority, or simple majority consent, possible inequities may result under any consent governance regime. Some have suggested that majority consent governance would "prevent a single market center from controlling or limiting development for purposes of parochial ends."[34] In certain cases, we agree with this position.[35] In other cases, it is inequitable to allow a majority of participants with a combined market share well below 50% to stand in the way of potential improvements proposed by the minority participants that command a much greater market share.

Despite these dilemmas, we believe that the concept of unanimous consent governance with respect to *all* NMS plan amendments should be reexamined. Although we continue to believe that with respect to major amendments to a NMS plan, minority interests in the plan must be protected through unanimous consent governance, many technical or otherwise minor amendments should be subject to majority consent governance. As a starting point, the Advisory Committee should consider whether it is feasible to devise a bright line test that only plan amendments that effect a single plan participant's market structure should require unanimous consent. Finally, we believe that the entry of new participants to the plan should be self-executing, requiring only SEC approval.

b. *Revenue and Cost Allocation*

Assuming that SROs would be the direct participants in a NMS plan associated with the Single Consolidator (discussed below), we must examine how such participants should allocate revenues and

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[33] The market choice alternative will also present governance issues to the extent that two or more markets participate in a NMS plan.

[34] *See* Letter (and enclosed proposal to modernize the national market system) from Gerald D. Putnam, Chief Executive Officer, Archipelago LLC, to Dean Joel Seligman, dated December 6, 2000 ("Archipelago Submission").

[35] For example, the NYSE recently has frustrated attempts by the NASD to propose to the ITS Operating Committee ("ITSOC") a technical amendment to the ITS Plan relating to NASD's use of the Regional Computer Interface. In particular, the NYSE insisted that other unrelated issues be addressed in the proposed amendments before presenting it to the ITSOC. In effect, because of the unanimous consent governance regime for all Plan amendments, NYSE is able to push its own agenda by rejecting a seemingly innocuous and entirely technical amendment to the Plan. *See also* note 21, *supra*, discussing the ITS Plan member's right to review CSE rule changes.

costs associated with the operation of the Single Consolidator. The effect of any agreed upon revenue and cost allocation method should minimize the effect of "inter-exchange subsidies" (discussed above), while encouraging each participant to have a meaningful role in the development and success of the NMS plan.

To this end, Nasdaq believes that the market responsible for the execution of a particular security transaction should be credited with a corresponding allocation of the revenue from the associated NMS plan for the Single Consolidator. Moreover, Nasdaq believes that its method of sharing revenues (*i.e.*, based on data value (50 – 50 trade volume and share volume)) is preferable to the CTA/CQ methodology or another method such as quote activity.[36] As noted above, quotation information, other than BBO information, would not be subject to the NMS plan and the Single Consolidator. Accordingly, revenue sharing calculations for quotation information in respect of NMS plan participants would be based exclusively on each participant's respective last sale and BBO information. This methodology encourages competing markets to seek out increased order flow to their respective markets through robust competition, and revenues would be allocated in direct proportion to the true economic value that each market provides in relation to the aggregate data stream.

In addition, costs associated with the operation of the Single Consolidator should be allocated equally among all participants in the associated NMS plan. Alternatively, plan participants could consider allocating costs among such participants in proportion to their respective share of revenue, assuming the revenue sharing is based on data value. This alternative would be conditioned on each plan participant sharing fixed or administrative costs equally. Nasdaq supports a buy-in provision for setting up the Single Consolidator, such that applicable expenses are shared equally across all plan participants, with a continued buy-in for new entrants to be shared equally among all existing participants. The cost associated with the establishment of the Single Consolidator will be substantial, and unless each plan participant shares equally, there will not be a shared incentive to keep costs reasonable and the Single Consolidator efficient.

[36] A methodology of revenue sharing that was based on quote activity is likely to create inequities because of the potential for manipulation of quotations to generate revenue through the plan. *See* Letter from Annette Nazareth, SEC, to The Honorable John Dingell, dated December 21, 2000, available at http://www.house.gov/commerce_democrats/press/secspoofing.pdf (responding to request by Congressman Dingell to Chairman Levitt for information on the entry of "phantom quotes" by market makers).

c. *Participation in NMS Plan Governance*

Nasdaq believes that non-SRO entities – such as ECNs, ATSs, market makers, specialists, other broker-dealers, investors, and market data vendors – should have a voice in the operation of any NMS plan, bearing in mind, however, that Congress, by enacting Section 11A(a)(3)(B) of the Exchange Act, clearly contemplated that only SROs would directly participate in the governance of a NMS plan.[37] This structure is supported by the fact that SROs represent the various constituencies that comprise their respective membership communities and consider each member class when making decisions affecting market structure. In addition, it is important to have a workable governance structure in place to effectively carry out the goals of a NMS. As the SEC has recognized in this regard, "[i]t is the SROs – the organizations that have registered under Sections 6 and 15A of the [Exchange] Act – that are charged with the front-line responsibilities for operating and regulating the primary U.S. market."[38] Therefore, it is the SROs that must have ultimate authority to make decisions regarding proposed plans.

In the release adopting Rule 11Aa3-2, governing the filing and amendment of NMS plans, the SEC made clear that every SRO must enforce compliance with any NMS plan by its members and stated that, "[s]ince the enactment of the federal securities laws in the 1930s, the concept of self-regulation has been a cornerstone of Commission and industry regulatory structure."[39] In addition, the SEC noted that "an essential part of the self-regulatory structure should be the obligation on the part of these entities to enforce the provisions of NMS Plans."[40]

In particular, SROs have assumed the responsibilities and incurred the costs associated with exchange or SRO status. The regulatory costs associated with being an exchange or SRO are substantial.[41] SROs have significant self-regulatory obligations mandated by the Exchange Act. For example, SROs must, among other things: (1) operate a particular market in accordance with the Exchange Act; (2) comply with the requirements established in the SEC's automation review program ("ARP") with respect to capacity, stress testing, and quality assurances of their technological

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[37] In particular, Section 11A(a)(3)(B) authorizes the SEC, in furtherance of its statutory directive to facilitate the development of a NMS, by rule or order, "to authorize or require self-regulatory organizations to act jointly with respect to matters as to which they share authority under [the Exchange Act] in planning, developing, operating or regulating a national market system (or a subsystem thereof) or one or more facilities thereof."

[38] *See* SEC Market Data Concept Release, *supra* note 10, at Section I.

[39] *Procedures and Requirements for National Market System Plans*, Exchange Act Release No. 17580 (February 26, 1981).

[40] *Id.*

[41] The SEC noted in its 1999 concept release discussing market information fees and revenues that the SROs' combined total expenses in 1998 were $1.68 billion. *See* SEC Market Data Concept Release, *supra* note 10, at Section IV.A.

infrastructures[42]; (3) promulgate rules designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and to refrain from imposing unnecessary or inappropriate burdens on competition; (4) establish surveillance programs to detect any violations of such rules; (5) promulgate and enforce compliance by their members and their associated persons with the federal securities laws and SRO rules that govern all aspects of their members' securities business; (6) conduct examinations of their members, monitor financial and operational reports, and investigate potential violations of applicable federal and SRO rules; and (7) establish and maintain listing standards that govern the securities that may be traded in their respective markets.

In conjunction with our views on governance structure of the NMS plan associated with the Single Consolidator, we also believe that only SROs should be able to report transaction and quotation information directly to the Single Processor. SROs use their rulemaking authority and disciplinary powers to ensure the accuracy and reliability of quotation and last-sale trade information reported by their members. For example, SROs establish rules that require their members to report last-sale transactions on a real-time basis and prohibit manipulative and fraudulent activity (*e.g.,* painting the tape or marking the close). This type of "quality control" could be compromised if non-SRO entities were permitted to transmit their data directly to the Single Consolidator without going through their SRO.

To the extent that a non-SRO wants to participate directly in such NMS plans (and report market information directly to the Single Consolidator), it could register as a national securities exchange (which also confers SRO status pursuant to the Exchange Act).[43] In the release adopting the rules governing the regulation of exchanges and ATSs, the SEC recognized that there are certain benefits of choosing to register as a national securities exchange, including: (1) more autonomy in their daily operations than broker-dealers possess; (2) elimination of the oversight role served by a competing national securities exchange or national securities association; and (3) the ability to establish independent rules of conduct, trading rules, and fee structures for access.[44]

While we believe that SROs are the logical direct participant of, and conduit to, the Single Consolidator, we also feel that entities that choose not to become registered national securities exchanges or SROs should nevertheless have a voice in NMS plan governance. In particular, Nasdaq believes that an appropriately constituted advisory committee would provide an excellent forum for non-SROs to offer their views. Nasdaq envisions that such an advisory committee would be afforded the opportunity to

[42] Exchange Act Release Nos. 27445 (November 16, 1989) ("ARP I"), and 29185 (May 9, 1981) ("ARP II"). ARP I and ARP II were established in response to operational difficulties experienced by SRO automated systems during the October 1987 market break.

[43] Section 3(a)(26) of the Exchange Act defines the term "self-regulatory organization" to include a national securities exchange.

[44] *Regulation of Exchanges and Alternative Trading Systems*, Exchange Act Release No. 40760 (December 8, 1998), at Section IV.B.

comment on all aspects of NMS plan governance. In addition, the comments submitted by the advisory committee would be required to be duly reflected in any subsequent public filings or notices submitted to the SEC. In particular, ECNs, ATSs, market makers, specialists, other broker-dealers, investors, and market data vendors should be represented on the plan's advisory committee and should be provided a forum to present their views. As noted above, we urge CTA/CQ and ITS participants to adopt this approach, as we intend to do for the Nasdaq/NMS/UTP Plan.

III. Inter-Market Linkages

We believe that the issue of inter-market linkages is beyond the scope of the difficult market information issues faced by this Advisory Committee. Because some members of the Advisory Committee have, however, introduced the issue into the scope of the Advisory Committee's deliberations, we will provide a brief outline of our views on this issue.

The most important point to be made in this discussion is that the processor of quote and trade information is not itself a market – a point that we fear some have missed.[45] In particular, one member proposed that the exclusive processor or "ESIP" operate a quote and trade collection mechanism and an inter-market linkage and that any broker-dealer or exchange trading Nasdaq-listed securities be required to use the facilities the ESIP provides and be subject to the ESIP's regulation and oversight.

The Exchange Act does not contemplate that the functions of SROs and ESIPs are interchangeable. In fact, SROs and ESIPs serve very different functions and are subject to different obligations under the Exchange Act. ESIPs are essentially data processors, responsible for collecting, consolidating, and disseminating information on a neutral basis. Moreover, ESIPs are subject to a very different, and much lighter, level of governmental scrutiny compared to SROs. The SEC oversight authority over ESIPs is used primarily to make sure that the ESIPs do not behave in an anti-competitive manner and that their systems are able to process information in a timely and effective way. As noted above in greater detail, SROs have significant self-regulatory obligations mandated by the Exchange Act that include operating a market, complying with ARP guidelines, and rulemaking, investigation, enforcement, and surveillance responsibilities with respect to trading on such markets and the practices of their members.

We are opposed to the notion of creating an entity responsible for an inter-market linkage that, in effect, operates a "soft" consolidated limit order book. Imposing such a structure on competing markets would be contrary to the intent of Congress to facilitate the development of a NMS. In the legislative

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[45] *See e.g.*, Archipelago Submission, *supra* note 34.

history to the 1975 Amendments, Congress wisely stated that it did not intend to "force all markets for all securities into a single mold."[46]

Today, various market centers vigorously compete for market share on many different levels. For example, markets compete by seeking to provide trading platforms that afford customers the best opportunity to receive quality executions. In addition, markets compete through the development of superior technological innovations in respect of their order execution facilities. Having an ESIP operate and regulate an inter-market linkage would stifle competition among markets and any resulting incentives to develop innovative order execution facilities, and in effect, "force all markets for all securities into a single mold."

Nasdaq has been criticized in the past for blurring the lines between its market functions and ESIP functions.[47] In conjunction with SuperMontage, Nasdaq has agreed to cooperate with other plan participants in revising the Nasdaq/NMS/UTP Plan to select an independent exclusive processor for Nasdaq-listed securities and examine the issue of inter-market linkages.[48] Interestingly, various market participants, including the same members of this Advisory Committee that support the development of an ESIP-operated and regulated market,[49] have been central figures in the opposition of Nasdaq's operation as both an exchange and an exclusive processor.

To the extent that an inter-market linkage plan is necessary, however, Nasdaq strongly believes that such a plan should be completely separate from the NMS plan associated with the Single Consolidator. Moreover, Nasdaq believes that any linkage should be established and operated in accordance with the following considerations:

- ***Participants in the inter-market linkage plan would have to build the linkage.*** Each participant in the inter-market linkage plan would be required to share equally in the costs necessary to build the inter-market linkage. We would not support using Nasdaq facilities (*e.g.*, SelectNet, SuperSoes, or SuperMontage) as the inter-market linkage. While Nasdaq has allowed UTP exchanges to use Nasdaq's facilities (*i.e.*, SelectNet linkage for the CHX), this was an accommodation and was not meant to suggest that SelectNet would serve as an appropriate inter-market linkage. Nasdaq has been willing to provide such an accommodation for access to Nasdaq facilities, but this accommodation does not occur pursuant to any inter-market linkage plan, and Nasdaq is free to charge UTP exchanges for this accommodation at the same rates that Nasdaq charges its members.[50]

[46] S. Rep. No. 75, *supra* note 1, at 7.

[47] *See, e.g.*, Letters from Gerald D. Putnam, Chief Executive Officer, Archipelago LLC, to Jonathan G. Katz, Secretary, SEC, dated June 19 and September 15, 2000 ("Archipelago SuperMontage Comment Letters"), and Letters from Douglas M. Atkins, President and Chief Executive Officer, Instinet Corporation, to Jonathan G. Katz, Secretary, SEC, dated September 14 and December 6, 2000 (commenting in response to Nasdaq's SuperMontage proposal) ("Instinet SuperMontage Comment Letters").

[48] *See* SuperMontage Approval Order, *supra* note 2.

[49] *See* Archipelago Submission, *supra* note 34.

[50] The NYSE provides a similar accommodation to members of regional exchanges. For example, the NYSE provides Madoff, a specialist on the CSE, SuperDot access to the NYSE as an alternative to the ITS linkage.

- ***Nasdaq does not believe that any inter-market linkage plan should impose inter-market trade-through or print protection rules.*** In other words, each broker-dealer must analyze its best execution obligations when determining whether to improve its quote to execute a customer order at or better than the then-prevailing NBBO or to use the linkage to route the order to another exchange. In a decentralized, fast-moving, decimalized market, a trade-through rule would be technologically infeasible.
- ***Exchanges should impose a trade-through disclosure requirement on their members if they execute orders at a price inferior to the NBBO.*** Unlike an onerous, inter-market trade-through rule, exchange members should have flexibility to determine how best to meet their respective best execution obligations and disclose to customers the results of their order routing/execution decisions.[51]
- ***The inter-market linkage plan would create a means for accessing better prices on other exchanges on a voluntary basis for those exchange members that want to access those prices.***
- ***The linkage would be a simple communications mechanism and would provide order routing only with notices of receipt and confirmations of execution coming back to the order-entry party.***
- ***The execution would occur in the recipient's market execution system.***
- ***Exchanges must automate their response time, but free-market economics should dictate the response time, as opposed to an inter-market linkage rule.***
- ***Exchanges accessed through this inter-market linkage may charge a liquidity fee to the accessing party, as if that party was a member of the receiving exchange.***

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We appreciate the opportunity to present our views to the Advisory Committee. We welcome the opportunity to discuss our views with other members of the Advisory Committee and, together, explore ways to strike a balance between regulation and competition that is more appropriate in today's market environment.

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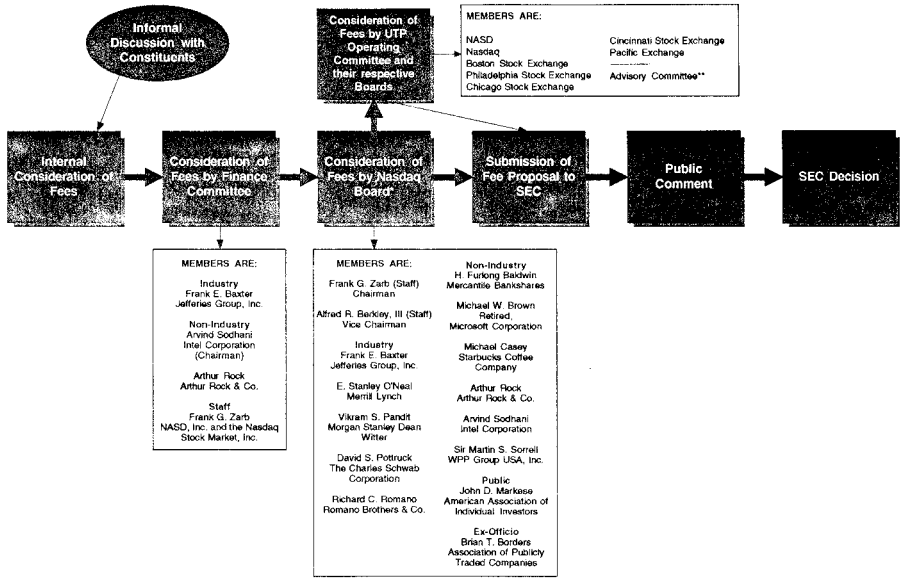
[51] This approach would be consistent with the SEC's recent determination with respect to the options markets not to mandate a specific linkage plan. In particular, the SEC stated that "an important feature of the Trade-Through Disclosure Rule . . . [is] that it does not prohibit intermarket trade-throughs. At times investors may value speed, size, or liquidity over price. By not prohibiting intermarket trade-throughs, the rule permits investors to achieve their goals and provides them with information that will facilitate their ability to actively monitor whether the quality of executions they receive is satisfactory." *See Firm Quote and Trade-Through Disclosure Rules for Options,* Exchange Act Release No. 43591 (November 17, 2000).

NASDAQ
An NASD Company

EXHIBIT 3

MARKET DATA FEE REVIEW PROCESS



* Assumes effectiveness of Nasdaq's exchange registration.
** In our white paper to the SEC Advisory Committee on Market Information, we propose that an advisory committee composed of non-SROs (e.g., ECNs, ATSs, broker-dealers, investors and data vendors) be afforded the opportunity to comment on NMS plan issues, including fees.

April 20, 2001

The Honorable Richard H. Baker
Chairman
House Financial Services Committee
Subcommittee on Capital Markets, Insurance
and Government Sponsored Enterprises
2129 Rayburn House Office Building
Washington, DC 20515-6050

Re: Hearing on Market Data, March 14, 2001

Dear Mr. Chairman:

Thank you for the opportunity to testify on March 14, 2001, on behalf of The Nasdaq Stock Market, before the Capital Markets Subcommittee on competition and transparency in securities market data. We are fully supportive of that objective and are pleased to have had the chance to describe publicly our commitment to continuing innovations that increase the availability of our market data to investors, as well as the transparency of the process for establishing the fees for real-time market data.

We would like to reiterate the importance of these issues to our nation's economy and make clear our view that the Subcommittee's work in this area can play a valuable role in shaping the national dialogue on these issues. We welcome the opportunity to compete and innovate by offering still more enhanced trading capabilities and related information.

For a nation that has led in the development and operation of securities markets of unparalleled integrity, restrictions on the ability of markets to compete and innovate on a fair basis and to receive value for the services they provide may undermine the safety and soundness of our securities markets and their role and position in the worldwide economy.

In response to your request, we submit the following additional comments and information for inclusion in the hearing record.

Additional Comments

First, we want to correct a misimpression that may have arisen from comments made by the General Counsel and Executive Vice President of The Charles Schwab Corporation (Schwab), Ms. Carrie Dwyer. Ms. Dwyer is correct that the current non-professional fee for real-time market data of one-half cent per quote ($.005), up to a cap of $1 per month, was instituted under a temporary pilot program. However, contrary to her suggestion, our long-standing intention has been to approve rules changes to make these fees permanent. In fact, Nasdaq senior management had proposed to make these fees permanent prior to March 14, and the Nasdaq Board has approved this change. In short, as our testimony demonstrated, Nasdaq has aggressively reduced its fees in recent years as the demand for real-time market data has increased.

Second, we understand that there is an interest among certain parties at the hearing to attempt to standardize through government intervention the private contracts that each market has with its market data subscribers, and create a single uniform contract across all markets. We disagree with the sentiment expressed by Randy MacDonald of Ameritrade Holding Corporation that standardization of market data contracts should be dictated by legislative action or bureaucratic fiat. Each exchange, self-regulatory organization ("SRO"), or vendor that licenses market data has different business models, interests and approaches to limit risk and protect its rights through market data contracts. We do not believe that language in private contracts in this area should be dictated by legislation or regulation. We, at Nasdaq, have actively participated with other members of the Financial Information Services Division (FISD) of the Software and Information Industry Association (SIIA) to address issues relating to distribution of market data, including contract issues. We believe these matters are better left to private-sector initiatives.

Third, Nasdaq appreciates your invitation to share our views on possible legislative provisions to increase competition in market data. However, as a general proposition, we suggest that legislating in this area may be premature until the Seligman Committee has reported its findings and recommendations later this year. The Seligman Committee is comprised of academic and industry experts who represent all points of view on market data issues, and we believe the Subcommittee could benefit from the fruits of its deliberations. In particular, the White Paper submitted by Nasdaq to the Seligman Committee champions a significantly more competitive environment for market data. We simply believe that investors' interests in the stability of our Nation's primary markets dictate that the decisions of Congress in this area be carefully considered and fully informed.

In fact, we are concerned that certain aspects of market data could be subjected to burdensome new regulations that could adversely affect competition and innovation.

Particularly, although Nasdaq has sought to make its market data available to the widest possible audience – including using innovative technologies like the Internet – we have encountered obstacles that threaten to inhibit the free flow of this information. For example, Schwab recently requested that the SEC review our proposed arrangements to have a third-party vendor make real-time market data available from a link on the Nasdaq.com website.[1] We are now in the midst of discussions with the SEC staff regarding Schwab's assertion that this arrangement needs to go through the lengthy rule filing and review process (particularly since the market data would be provided by a third-party vendor that would pay the same fees as other vendors licensing Nasdaq market data).

Responses to Questions

We are pleased to provide for the Subcommittee's consideration, the following responses for the record to the questions submitted by Chairman Oxley and Representative Ose:

1. *In one of the appendices to Mr. Knight's testimony, he states that non-SROs, like ECNs, market makers, specialists, broker-dealers, investors, and market data vendors, should have a voice in the operation of the market data Plans. But he also observes that "it is inconsistent with section 11A of the Exchange Act to allow non-SROs to participate directly in Plan governance." Why shouldn't Congress amend section 11A to allow for this?*

As described in our testimony, we have recommended a "Market Choice" alternative to market data that could avoid the need for unwieldy national market system ("NMS") Plans. The proposal would allow markets to choose the alternative path of making market information available to any number of non-exclusive or competing processors.

Even if the framework of the Plans is preserved (such as through our second choice, the "Single Consolidator" alternative), we think the voice of non-SROs should be expressed through appropriately constituted advisory committees. In this regard, we recommended in our White Paper to the Seligman Committee that such advisory committees be afforded the opportunity to comment on all aspects of NMS Plan governance and that those comments would be required to be duly reflected in subsequent public filings or notices submitted to the SEC. Going beyond that and giving non-SROs the right to participate directly in Plan governance would, in our view, be inappropriate because non-SROs have neither incurred the substantial costs nor assumed the substantial responsibilities associated with exchange or self-regulatory status. In other words, we believe that to treat market data vendors like SRO's would be contrary to the long-standing statutory work of our security laws. To eliminate that distinction would upset the careful balance that exists to protect investors and promote wide distribution of market data.

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[1] Schwab apparently was concerned that Nasdaq would make free, real-time quotes available over the Nasdaq.com website while charging Schwab for such information. This concern was misplaced. Nasdaq.com's plan is to provide a simple hyperlink to an independent commercial vendor that will, under its own business model, license market data from Nasdaq and various exchanges (just as any other vendor) and supply real-time quotes to investors. The hyperlink will do no more than bring to Nasdaq's website visitors who wish to view a real-time quote through the hyperlink, and then bring the visitor back to Nasdaq.com for other related information on the companies listed on Nasdaq.

2. *Ms. Dwyer points out in her testimony that third party vendors should be offered the opportunity to disseminate unconsolidated market data (including multiple levels of price and depth information). She suggests "let the exchanges compete with other market data vendors based on price and quality of services." Does anyone disagree?*

No, with some important caveats. Nasdaq believes that best bid, best offer and the last sale data required by the Vendor Display Rule ("mandatory minimum") is an essential benchmark for determining whether a broker-dealer is providing best execution to its customers. Accordingly, investors should have access to such mandatory minimum data. However, we do not believe that all investors need that information at all times throughout the day. Further, we suggest that unconsolidated or enhanced market data could be made available in appropriate circumstances.

Toward that end, we have recommended that the Seligman Committee consider whether current exceptions to the Vendor Display Rule should allow the dissemination of unconsolidated and enhanced data. To the extent that the mandatory minimum data is easily accessible by investors when making investment decisions, perhaps the strict application of the Vendor Display Rule is not necessary or appropriate.

3. *If third party vendors were permitted to do this, how could they compete against a market, such as the NYSE, that has 85 percent of the liquidity and therefore virtually all of the useful information anybody would want about the listed market?*

We believe that market forces should be permitted to sort this out . In the competitive environment of our securities markets, vendors and exchanges alike will have to find new ways to provide "value added" information and services. If vendors successfully innovate in this way, they will be able to claim market share from traditional providers. These markets are very dynamic and innovative and should be allowed to operate free of unnecessary government intrusion.

4. *The Federal securities laws mandate that the terms for market data distribution be "fair and reasonable" and "not unreasonably discriminatory."*

a. *Is this mandate effectively being enforced?*

Yes. Our experience over the years has been that market data distribution has, in fact, been fair, reasonable and not unreasonably discriminatory. This has been one of the great successes of the checks and balances created within the framework established by Congress in the Securities Act Amendments of 1975 ("1975 Amendments").

As I described in my testimony, we have an exhaustive process to establish market data fees to ensure that each affected group of market participants views the fees as fair and reasonable, while also reflecting the market data's value to the marketplace. This process includes internal reviews that are comprehensive, inclusive, and consider the views of affected parties. In addition to checks and balances internal to Nasdaq, there are also external ones, including the review by the UTP Operating Committee and, of course, the SEC review that involves public comment.

b. What evidence do you have for your response?

The lack of public objection, except from entities promoting competing business models. The SEC has reviewed and approved NMS plan rules relating to market data distribution. To our knowledge, there has been only a single formal challenge to our terms for market data distribution. We also believe that our proactive efforts to increase the small investors' access to our data through dramatic fee reductions for non-professional users illustrates Nasdaq's commitment to creating pricing models that respond to technological advances, promote wide dissemination of data, and reflect the relative value that a single investor receives from Nasdaq's market data in comparison to the value that a broker, servicing many investors, receives from the market data. Concerns about the current system are often the product of the choice of competitors to obtain government support for a particular market model.

5. It appears that the current contracting process is unnecessarily complicated and results in high administrative costs to vendors and subscribers. Do you object to streamlining this process and making the resulting contractual terms uniform and public?

No, if these objectives are pursued through private sector initiatives. We make information on the terms and conditions (including fees) for our market data fully available to anyone who visits our Nasdaqtrader.com website. We also support private-sector initiatives (such as through FISD/SIIA) currently underway to create public databases of these kinds of information. However, we do not believe that the objectives of streamlining the market data contracting process and making contractual terms more uniform justify intruding on the rights of private parties – whether exchanges, SROs or vendors – to determine for themselves the terms of their private contracts.

6. Mr. Bell's testimony states that the 1975 securities amendments "crafted a regulatory and legal regime for a world without online brokerages, a world without ECNs, a world without modern communications systems, a world where exchanges were content to serve as not-for-profit public utilities." Why must rules governing market data be updated?

As we have reflected on the 1975 Amendments in connection with our participation in the Seligman Committee, we have been struck by how the flexible framework created by Congress has been in allowing regulators and market participants alike to respond to the difficult market structure issues. Although the 1975 Amendments were crafted in a world without online brokerage firms, ECNs, or modern communications vendors, the 1975 Amendments played a key role in the dramatic expansion of our securities markets that they now enjoy. However, no matter how well suited the 1975 Amendments were to their time, we think it is appropriate now to consider alternative approaches as our markets move into a new phase.

In particular, we believe the focus for change in this area should be on striking a balance between regulation and competition that is more appropriate in today's market environment. Restrictions on competition should be reduced, especially restrictions that

– however suited to the 1970s – no longer make sense today. As we proposed in our White Paper, we believe this should be done either by limiting the compulsory nature of joint NMS Plan participation (by creating alternatives to compulsory participation through our "Market Choice" proposal) or by limiting the scope of compulsory participation to what is necessary to accomplish the purposes of the 1975 Amendments and leaving the rest to competition. In this regard, we believe such changes can be accomplished within the existing statutory framework.

7. *Market data as intellectual property.*

a. *Is market data public property?*

No, market data is not public domain or public property.

b. *Is it a constructed product?*

Yes. Market data is synthesized data, which is not detached or separate from the quality controls that produce such data. Individual bits of quote or trade information have no value by themselves. It is the way in which such data interact within the marketplace and the arrangement and consolidation of the data – backed by a robust regulatory framework insuring integrity – that imbues the data with value. Stated another way, the trade information that brokers (or more directly, their customers) provide to Nasdaq is the raw material; the finished product is the constructed real-time market data to which we add layer-upon-layer of value, primarily through stringent quality controls.

c. *Is it appropriate to charge money for market data?*

Yes, it is appropriate for markets to charge for the market data they produce. This recognizes the tremendous infrastructure costs a market incurs to produce market data, the "value added" qualities a market brings to market data, and the market's rights in the data. Since the "ticker cases" of the early 1900s, when bids were called out in an open trading pit, courts have recognized proprietary rights in market data, stressing the importance of a market's need to reap the benefits of what it has sowed. Like markets of the early 1900s, today's markets have made significant investments to develop mechanisms, rules, and systems that ensure accurate and rapid collection, synthesis and dissemination of market data. Third parties should not be permitted to free ride on a market's extensive efforts to produce meaningful market data.

* * * * *

We look forward to working with you on the issue of market data and on other matters within the jurisdiction of the Subcommittee. Please contact me directly if I can be of assistance to you or if I can provide the Subcommittee with any further information.

Sincerely,

Edward S. Knight

Testimony of Stuart Bell

Bloomberg Financial Markets

on Public Access to Market Data

Before the Committee on Financial Services

Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises

March 14, 2001

Introduction. Mr. Chairman and Members of the Subcommittee. My Name is Stuart Bell, and I am pleased to have the opportunity to testify on behalf of Bloomberg Financial Markets regarding the critical issue of access to market data.

Bloomberg Financial Markets provides multimedia, analytical and news services to more than 150,000 terminals used by 350,000 financial professionals in 100 countries worldwide. Bloomberg tracks more than 135,000 equity securities in 85 countries, more than 50,000 companies trading on 82 exchanges and more than 406,000 corporate bonds. Our clients include most of the world's central banks, as well as institutional investors and broker-dealers, commercial banks, and U.S. government offices and agencies. Bloomberg News is syndicated in over 350 newspapers, and on 550 radio and television stations worldwide. Bloomberg publishes seven magazines around the world. Bloomberg Press publishes books on financial subjects for the investment professional and non-professional reader.

Bloomberg Financial Markets also provides the services of Bloomberg Tradebook, an electronic agency broker serving institutional investors and other broker-dealers. Bloomberg Tradebook is one of the largest electronic communications networks (ECN), regularly matching orders in excess of 100 million shares daily. Bloomberg Tradebook counts among its clients many of the nation's largest institutional investors. Bloomberg Tradebook and other ECNs have thrived for the simplest of reasons – we are a market solution to our customers's market needs.

In short – as both a vendor and an ECN – Bloomberg is acutely aware of the critical importance to investors and the markets of access to market data. Chairman Oxley and others have often accurately referred to this data as the "oxygen" of the market. A brief look at the history of market data regulation underscores the need for strong congressional oversight and action to ensure the availability of that oxygen and the development of logical market data policy that serves investors and markets.

Securities Acts Amendments of 1975. Before the 1970's, no statute or SEC rule required self-regulatory organizations (SROs) to disseminate market information to the public or to consolidate information. SROs decided what information to disseminate, to whom to

disseminate, and what fees to charge. Indeed, the NYSE, which operated the largest stock market, severely restricted public access to market information, particularly its quotations. Markets and investors suffered from this lack of transparency.

The Congress responded by enacting the Securities Acts Amendments of 1975. This Act emphasized the need for accurate, up-to-the-second market information to guide those who trade in the U.S. securities markets. The Act also empowered the SEC to facilitate the creation of a national market system for securities, with market participants required to provide information for each security, which in turn was to be consolidated into a single stream of information disseminated to the public.

At that time, the exchanges and the NASD perceived that the establishment and maintenance of publicly disseminated quotation and last sale data could most efficiently be accomplished by allowing combinations such as the Securities Industry Automation Corporation (SIAC) and Nasdaq to be the exclusive processors. The Congress, however, was by no means convinced that it was necessary or appropriate to endow the SROs, alone or in combination with one another, with a monopoly on data dissemination. While the Congress recognized that SEC action would be necessary to promote the creation of a composite quotation system and a consolidated last sale tape, it carefully avoided endorsing a monopoly approach.

Indeed, the Congress clearly recognized the dangers of data-processing monopolies. The Congress warned the SEC to regulate the exclusive securities information processors as public utilities and to guard aggressively against all manner of abuse, pointing to the risk of antitrust problems if such regulation were not effectively applied:

> The Committee believes that if economics and sound regulation dictate the establishment of an exclusive central processor for the composite tape or any other element of the national market system, provision must be made to insure that this central processor is not under the control or domination of any particular market center. Any exclusive processor is, in effect, a public utility, and thus it must function in a manner which is absolutely neutral with respect to all market centers, all market makers, and all private firms. *Securities Acts Amendments of 1975,* Report of the Senate Committee on Banking, Housing and Urban Affairs to Accompany S. 249, S. Rep. No. 94-75, 94th Cong., 1st Sess. 11 (1975).

The Congress clearly envisioned that securities information processors would be regulated in the same strict way as public utilities are regulated so as to avoid abuse and undue expense and to increase price transparency. Monopolies were not the Congress's preferred course and it was careful to insist that they be strictly controlled if permitted to exist at all.

The Current Challenge. At present, most SROs are non-profit organizations. The NASD, however, has largely completed its privatization of Nasdaq and it may well be that other privatizations will follow. Under the cover of a non-transparent bureaucracy, non-profit SROs

have exploited the opportunity to subsidize their other costs (*e.g.*, costs of market operation, market regulation, market surveillance, member regulation) through market information fees.

For all SROs, the incentive will be strong to exploit this government-sponsored monopoly over market data by charging excessive rates for market data and using those monopoly rents to subsidize their competitive businesses. Indeed, shareholders of these now for-profit entities will effectively demand that market data charges remain excessive.

Continuing and augmenting this unfair monopoly will hurt investors and compromise the efficiency of the markets in many ways. Investors will be forced to pay excessive monopoly rents for market data. Investors will be denied a level playing field that would otherwise exist in the absence of those monopoly subsidies. Investors will also lose as major market players – comfortable as government-sponsored monopolies – fail to innovate, leaving American markets vulnerable to future offshore competition.

A Possible Solution. The Congress built into Section 11A of the Securities Exchange Act of 1934 a recognition that SROs, when they act as exclusive securities processors, enjoy a monopoly the Commission should carefully regulate. How can the Congress and the SEC oversee this public utility function without committing substantial resources to ratemaking? One way would be to limit the category of service for which the regulated rates could be charged. One readily available way to do that would be to require the SROs to gather data concerning quotations entered and transactions executed through use of their facilities, and provide this data at the cost of gathering it to third parties who would integrate the data pursuant to minimum standards set by the Congress or the SEC and sell it to the public at competitive prices.

The data-integration and dissemination functions currently performed by SIAC, OPRA and Nasdaq no longer need to be monopoly businesses, if indeed they ever did. There is no reason why any number of data aggregators could not distribute composite quotation data and consolidated transaction data in competition with SIAC, OPRA and Nasdaq if they were willing to do so in compliance with minimum standards. Indeed, it is likely that competition among data aggregators would result in a better, more reliable product than is available today from SIAC, OPRA and Nasdaq. It would stand to reason that competition in this sector would have a cleansing effect and would spur innovation and improvement.

Giving SROs monopoly status and regulating them as public utilities may have made sense when the Congress enacted the 1975 Amendments, but the need for a monopoly solution to much of the market's needs is now no longer present in light of dramatic advances in technology and reductions in communications costs. Today, the securities business is turning more frequently to competing, redundant electronic systems instead of monopolistic, unitary service providers. The reduction in communications costs makes that a sound choice today. Monopolies are not needed for most, if indeed any, of the functions related to the collection and dissemination of market information. Given the reduced cost of communications technology, it is now cost-effective for private competing systems that provide market information to maintain

duplicative, redundant information systems.

A Cost Based System of Gathering and Disseminating Market Information. There are a number of more modest steps that would enhance transparency and protect investors by moving us toward a system of market data fees based solely on the cost of data collection and dissemination, and not designed as a means of defraying other costs of operating or regulating an exchange or other market. These include:

* Create an accurate, updated and comprehensive database of market data prices, terms, conditions, policies, procedure, pilots and administrative interpretations of each exchange.

* Encourage exchanges to standardize market data terms, conditions, policies and procedures as much as possible.

* Encourage exchanges to simplify the accounting, auditing and reporting of market data usage.

* Develop criteria for evaluating exchange fee proposals as required by Section 11A of the Securities Exchange Act of 1934, which calls for fair, reasonable and non-discriminatory application of fees for market data.

Even adoption of the approach taken in proposed Rule 11Ab2-2, originally published by the SEC in 1975, would be beneficial. As proposed in 1975, Rule 11Ab2-2 would have required registered securities information processors to file updated financial statements in annual amendments to their Forms SIP. The SEC suggested that the filings required under the proposed rule could include:

* a complete listing of fees charged for market data;

* the number of users participating in each of the current fee programs; and

* audited financial statements that would set forth revenues (including an itemized listing of revenues attributable to different fees), expenses and distributions.

An Informed Consumer is the Best Policeman. The SEC has rightly placed considerable emphasis on best execution and price improvement. The best policeman on these issues, however, is not the government and not the SROs. It is the consumer. If armed with timely and inexpensively available market information, consumers will be able to make informed choices and to insist that technology be put to work to help them. If fees for market data are artificially high, that will tend to discourage widespread dissemination of market data and the core goal of promoting price transparency will be seriously undermined.

TRACE and NRMSIR – Cautionary Tales. Regulatory developments in the corporate and municipal bond markets underscore the absence of an economically efficient policy on market data that would benefit markets and investors and raise concerns regarding the possible resolution of these issues in the equities market.

A little over a year ago, the NASD, operating through its wholly owned subsidiary, Nasdaq, filed a proposed rule change with the SEC to create a corporate bond Trade Reporting and Comparison Entry Service (the TRACE proposal.) As approved a few weeks ago, the proposal creates a government-sponsored monopoly in bond data – just when Nasdaq has been transformed into a privately owned for-profit entity. Under the TRACE proposal, the SEC has granted the NASD an exclusive franchise by mandating, with only limited exceptions, that all NASD members report their corporate bond transactions to the NASD. The proposal as adopted would permit others to compete with NASD/Nasdaq – but not on a level playing field. NASD/Nasdaq would get market data free by law. Everyone else has to pay for it.

Is a de facto monopoly in this field necessary? The answer is a resounding no. Credible, highly capitalized market participants are ready to consolidate bond market data if competition is permitted to replace a government-sponsored monopoly in this arena. Numerous market participants filed comment letters asserting that open network technology has made it possible to collect and disseminate price information without a central monopoly provider. Indeed, Bloomberg and the Philadelphia Stock Exchange have actually made such a proposal. An open-architecture, competitive model would foster competition and innovation, minimize the need for regulatory oversight of fees and eliminate other problems inherent in TRACE.

The current debate over the nationally recognized municipal securities information repository (NRMSIR) raises similar troubling issues. The Municipal Securities Rulemaking Board (MSRB) recently proposed, for example, that all the NRMSIRs give to the MSRB all the data they had independently gathered, sorted and analyzed. While billed as a voluntary initiative, it is disconcerting that the MSRB would argue that compilations of data gathered after enormous expenditures of private time and money should be considered free for the taking.

In summation, the current market data policy in the United States does not promote competitive market forces, which would benefit investors and markets. On the equity side, we promote a government-sponsored monopoly with little effective ratemaking oversight, despite changes in technology that make monopolies unnecessary and despite the intentions of those monopolies to become for-profit enterprises. Indeed, on the corporate bond side, we are creating a government-sponsored monopoly despite the clear presence of private sector market participants that stand ready to compete to provide corporate bond pricing information. On the municipal bond side, where private sector actors have compiled valuable data at great expense over a period of years, the MSRB argues that data should be provided to them gratis, despite the fact that – unlike compilations in the equity markets and future compilations of corporate bond data if TRACE is implemented – these compilations have been created without the benefit of a government fiat mandating that others provide the data. Indeed, the creation of these municipal bond compilations shows that, even in the absence of governmental compulsion, market forces

will drive the gathering and disseminating of market data to those who need or want it.

Conclusion. The Securities Acts Amendments of 1975 crafted a regulatory and legal regime for a world without on-line brokerages, a world without ECNs, a world without modern communications systems, a world where exchanges were content to serve as not-for-profit public utilities. While we believe the model the Congress put forth in 1975 is in many ways fundamentally sound, it is clear that bedrock changes in our markets over the past quarter century demand a thorough congressional reexamination of the 1975 Amendments, including the provisions on market data.

We believe that competitive provision of market data should be encouraged to the maximum extent possible. The greater the transparency, the greater the opportunity to unleash market forces for the benefit of investors. At a minimum, we believe fees for market data should be based upon the direct costs of gathering and disseminating the data and that self-regulatory organizations that levy fees should provide regular, reliable and updated financial data setting forth revenues and expenses as a basis for the fees levied on users.

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Bloomberg
FINANCIAL MARKETS
COMMODITIES
NEWS

April 13, 2001

Chairman Richard Baker
Subcommittee on Capital Markets, Insurance
and Government-Sponsored Enterprises
Committee on Financial Services
United States House of Representatives
2129 Rayburn House Office Building
Washington, DC 20515-6050

Re: **Transparency and competition in the provision of market data**

Dear Chairman Baker:

Bloomberg L.P. ("Bloomberg")[1] appreciates the opportunity to present for the Committee's consideration our observations regarding market data. The following items identify the issues regarding market data that we consider most important, together with a number of recommendations for the collection, dissemination, pricing and regulation of market data that we believe are essential for maintaining and enhancing market transparency:

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[1] Bloomberg is engaged in the business of providing its customers with financial market information, news and analytics via its worldwide electronic network (the "BLOOMBERG PROFESSIONAL™ service"). Bloomberg also serves its broker-dealer and institutional customers' communications needs and facilitates their transaction of business by offering various additional services, including electronic messaging, non-anonymous offerings, bids wanted and equity order-routing and indications of interest, and linkages to certain exchanges within and outside the United States. Approximately two million text messages and transaction messages involving billions of dollars of securities are sent and received by Bloomberg customers across the BLOOMBERG PROFESSIONAL service every business day. In addition, Bloomberg expects in the future to provide access to additional points of liquidity as customer demand dictates.

- Bloomberg supports the basic principles and objectives of the Securities Acts Amendments of 1975, specifically the consolidated quotation and display rules that ensure the transparency of the markets. In light of the technological changes that have occurred in the markets over the quarter century since the 1975 Amendments were enacted and with the increasing prospect of the privatization of exchanges, we think it is necessary for the Congress and the Securities and Exchange Commission (the "SEC") to take affirmative steps to continue to promote market transparency.

I. Core Data: Access and Fees

- Following past practices, exchanges should continue to provide real-time access to the core data they receive pursuant to regulatory compulsion and customarily provide to data vendors. To date, the exchanges[2] have not been permitted to charge for data outside of those core data. That pattern should be continued. The core data must include necessary and essential market data that cannot be derived by reverse engineering, particularly the NBBO, last-sale data and other information required by data vendors to build the informational displays and analytical tools needed by the investment community (collectively, the "core data").

- The obligation of exchanges to provide the core data should not be a limited one that has been pre-defined by a given set of values or legacy products. To the contrary, the core data must be a continuous and dynamic flow of information that includes new data and enhancements to delivery technology.

- If an exchange sells a derived product (such as a depth-of-book indicator), it should have to make available to data vendors all the constituent data elements that were not otherwise available and were used to create or nourish the derived product, such as the depth-of-book data used to create or nourish the indicator. In other words, an exchange should not be able to use its monopoly access to unpublished market data to obtain a unique competitive advantage in the competitive market in derived products, such as data analytics. As a result, if an exchange chooses to construct a derived product from as-yet-unpublished data, it should be able to do so only upon making the additional data available to data vendors.

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[2] In using the term "exchange", we mean to include Nasdaq, which has filed an application with the SEC for registration as a national securities exchange.

- Exchanges should be free to compete to provide value-added functionality and analytics outside of the core data, but they should do so through separate legal entities that do not have the potential to be cross-subsidized by the activities of the exchanges as monopoly collectors, consolidators and disseminators of core data. These entities should bear the same costs for the core data as independent entities bear and should have to demonstrate through filings with the SEC that they are doing so.

  The problem posed by exchanges enjoying monopoly access to unpublished market data is not a hypothetical concern. In October 2000, Nasdaq introduced the "Nasdaq 100 Pre-Market Indicator" ("PMI") to gauge trading in the top 100 Nasdaq issues during the pre-opening market session. In March 2001, Nasdaq introduced a similar indicator, the "Nasdaq 100 After-Hours Indicator" ("AHI"), to gauge post-closing activity. Both the PMI and the AHI are constructed from data controlled solely by Nasdaq. According to Nasdaq's description of these products, "both indicators use unique editing logic that filters any bad trades from the calculation. The result should be a more accurate reading of market trends."[3] Since the inception of those indicators, neither of the indicators nor the supporting data have been made available to data vendors.

  Although Nasdaq announced on April 4, 2001 that "in response to customer demand, Nasdaq . . . will begin to disseminate these indicators to market data vendors beginning April 30th," the initial decision to exclude market data vendors from access to this information was arbitrary and capricious and illustrates the need to curb Nasdaq's otherwise unchecked market power as a government-sponsored monopoly.

  The example of these indicators vividly illustrates many of the unfair advantages enjoyed by the exchanges in competing with data vendors and other market participants. Market participants are required by law to provide for free to NASD/Nasdaq all the data concerning their quotations and trades, including bad trade data, when NASD/Nasdaq wears its hat as a government-sponsored collector of market data. As the exchanges become for-profit entities, the incentive will grow even stronger for the exchanges to exploit this government-created information advantage.

- Exchange members are required by law to submit trading data to the exchanges. The exchanges (i) should not be permitted to charge for delayed data, (ii) should not be permitted to charge data vendors such as Bloomberg for data derived from the core data and (iii) should not be permitted to charge a royalty on value-added functionalities or

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[3] *See* www.nasdaq.com. Click on After-Hours Indicator.

analytics created by data vendors or others. That is, the exchanges should not have any proprietary right to data outside the real-time window.

An average price helps illustrate the difference and relationship between derived data and core data. An average of two prices is derived data. The two prices used to calculate the average price is core data and a graphic display of the average price over a period of time, for example, a single trading day or multiple trading days, is a functionality.

- With the advent of decimalization, market participants need to see greater depth of book exposure. To preserve the current standards of transparency and to eliminate incentives for differential disclosure as exchanges become for-profit entities, Bloomberg believes that core data should include access for all market participants to the depth of book they need to effect their business on an equal footing. Since exchange members, by law, provide to the exchanges the raw material that comprises the exchanges' quotation and transaction data, Bloomberg believes that all market participants should have access to the highest level of transparency needed by market participants to make investment decisions.

- The fees charged for core data should be cost-based. By "cost-based", we do not mean that the exchanges should not realize a return on their investment in the facilities dedicated to the data collection, consolidation and dissemination functions. Rather, we recommend a cost-based approach to setting fees for core data based solely upon the reasonable and necessary costs of collecting, consolidating and disseminating market data, and not any other costs. The applicable standard should be the one customarily applied in ratemaking proceedings by state public utility commissions to evaluate whether the rates monopoly utilities charge are fair and reasonable (or "just and reasonable", as some state statutes prescribe). Like public utilities rates, the rates that the exchanges would be permitted to charge would not be limited to cost recovery, but would include a reasonable rate of return, determined by the regulator, on the capital allocable to gathering, consolidating and disseminating market data.

- A cost-based system for setting market data fees is consistent not only with the goals of the Securities Acts Amendments of 1975, but also with the need in today's environment to provide for full and rapid dissemination of market data on a nationwide basis. While exchanges and other self-regulatory organizations need to fund their operations and regulatory efforts, loading the costs of those services onto market data fees dramatically increases the cost of data retrieval by investors. Particularly since government-sponsored monopolies do the data collection and dissemination, it is important not to allow their fees for data dissemination to become a vehicle for defraying costs that would more properly be borne through membership assessments and other revenue sources.

II. SIA/Arthur Andersen Report

- We understand that, in considering fees for market data, the Committee also has considered the study by Arthur Andersen commissioned by the Securities Industry Association (the "SIA") and issued in the SIA's Report on Market Data Pricing in June 1999 (the "SIA/Arthur Andersen Report"). Bloomberg supports the principal recommendations put forward in the SIA/Arthur Andersen Report with respect to fees for market data. Specifically, we would recommend that the Congress take action to implement, through the SEC where appropriate, the following recommendations:

  —Create an accurate, updated and comprehensive data base of market data prices, terms, conditions, policies, procedures, pilots and administrative interpretations of each exchange. In implementing the SIA recommendation, Bloomberg suggests that the exchanges be required to publish contracts applicable to data vendors and others governing the provision of core market data, fees and rates charged for market data and policies and administrative procedures regarding the provision and use of market data;

  —Encourage exchanges to standardize market data terms, conditions, policies and procedures as much as possible;

  —Encourage exchanges to simplify the accounting, auditing and reporting of market data usage; and

  —Develop criteria for evaluating exchange fee proposals, as required by Section 11A of the Securities Exchange Act of 1934, which calls for fair, reasonable and non-discriminatory application of fees for market data. Such a rule filing on market data fees should project the impact on exchange revenues and user costs, including the impact:

    — on non-professional versus professional revenues and costs;

    — of substantial changes in usage by a class of users; and

    — of market data revenue "rebates" on various classes of users.

- In addition, we recommend that the exchanges be required to file annually with the SEC and make available to the public financial statements related to the core market data function, audited on the basis of regulatory accounting principles established by the SEC.

III. TRACE

Regulatory developments in the corporate bond market underscore the absence of an economically efficient policy on market data that benefits markets and investors. A little over a year ago, the NASD filed a proposed rule change with the SEC to create a corporate bond Trade

Reporting and Comparison Entry Service (the "TRACE" proposal). As approved in late January, the proposal creates a government-sponsored monopoly in certain bond data—just when Nasdaq has been transformed into a privately owned, for-profit entity. Under the TRACE proposal, the SEC has granted the NASD an exclusive franchise by mandating, with limited exceptions, that all NASD members report their corporate bond transactions to the NASD. The proposal as approved by the SEC permits others to compete with NASD/Nasdaq as to a limited amount of information—but not on a level playing field. NASD/Nasdaq gets all the reported data free by law. Everyone else has to pay for it.

Is a de facto monopoly in this field necessary? The answer is a resounding no. If competition were permitted to replace a government-sponsored monopoly in this arena, credible, highly capitalized market participants would readily consolidate bond market data. Numerous market participants filed comment letters asserting that open-network technology has made it possible to collect and disseminate price information without a central monopoly provider. Indeed, Bloomberg and the Philadelphia Stock Exchange have actually made such a proposal. An open-architecture, competitive model would foster competition and innovation, minimize the need for regulatory oversight of fees and eliminate other problems inherent in TRACE.

It is expected the TRACE proposal will go into effect in the near term. The Committee's market data legislation should supersede and preclude implementation of the SEC's approval of the TRACE proposal or, at a minimum, delay its implementation until the Committee has an opportunity to consider whether the public interest is served by a soon-to-be-for-profit entity with a government-sponsored monopoly over bond data. At a time when virtually all market participants recognize the need to move toward a market-oriented, competitive model for equity market data, the Committee should greet with skepticism regulatory efforts to create a government-protected data monopoly in the bond market. With the second phase of the Nasdaq private placement completed and with Nasdaq well on its way to becoming majority owned by its investors, now is the time to reduce, not to augment Nasdaq's government-sponsored monopoly powers.

IV. Conclusion

Bloomberg believes that preserving the principles of transparency in market data requires the provision of core data at reasonable cost and based upon publicly available information. Transparency also depends upon providing data to market participants on equal terms and prohibiting exchanges from using their positions as collectors, consolidators and disseminators of market data to cross-subsidize their other market-data-business activities.

* * *

We commend the Committee for its leadership on an issue of central importance to investors and our markets. We look forward to assisting the Committee in any way possible as you engage in this critical undertaking.

Very truly yours,

BLOOMBERG L.P.

By: *R. Douglas Kemp* by RDB
R. Douglas Kemp

Questions by Honorable Doug Ose
Hearing on "Public Access to Market Data – Improving Transparency and Competition"
March 14, 2001

1. If information dissemination is mandated at no charge or cost of recovery, then who will collect, analyze, and disseminate tomorrow's data?

A–We believe the Securities Acts Amendments of 1975 articulated the correct principles in addressing this question. The Act provides that charges for information should be cost-based. Clearly, this has not been achieved. Indeed, at the March 14th hearing, the New York Stock Exchange repeatedly testified that it could not ascertain the actual cost of consolidating and disseminating market data. With the NYSE contemplating a for-profit future, the alleged inability to ascertain these costs makes it impossible to ensure that market data users won't be overcharged in order to provide an anti-competitive cross-subsidy for the NYSE's competitive ventures.

The solution is to ensure that fees charged for data actually are cost-based, as visualized by the 1975 Act. By cost-based, we certainly do not mean that the exchanges should not realize a return on their investment in the facilities dedicated to the data collection, consolidation and dissemination functions. Rather, we urge a cost-based approach to setting fees that is based upon the reasonable and necessary costs of collecting, consolidating and disseminating market data, and not any other costs. The applicable standard should be the one customarily applied in ratemaking proceedings by state public utility commissions, where they evaluate whether the rates monopoly utilities charge are fair and reasonable (or "just and reasonable", as some state statutes prescribe). Like public utilities rates, the rates that exchanges would be permitted to charge would not be limited to cost recovery, but would include a reasonable rate of return, determined by the regulator, on the capital allocable to gathering, consolidating and disseminating market data.

2. If it is true that the MSRB believes compilations of data gathered after expenditures of private time and money should be considered free for the taking, what is the incentive for any aggregator to continue doing it in the future?

A-The Municipal Securities Rulemaking Board (MSRB) recently proposed that all nationally recognized securities information repositories (NRMSIRs) give to the MSRB certain disclosure data they had independently gathered, sorted and analyzed. While billed as a voluntary initiative, it is disconcerting that the MSRB would argue that compilations of data gathered after enormous expenditures of private time and money should be considered free for the taking. Indeed, were this initiative to advance, there would be little incentive to proactively gather, sort and analyze this data. As a result, these markets would be less efficient and investors would be suffer.

3. Is market data public property? Is it a constructed product? Is it appropriate to charge money

for market data?

A–Market data is public property. Indeed, this is one of the animating principles undergirding the Securities Acts Amendments of 1975.

Before the 1970s, no statute or SEC rule required self-regulatory organizations (SROs) to disseminate market information to the public or consolidate information. SROs decided what information to disseminate, to whom to disseminate, and what fees to charge. Indeed, the NYSE, which operated the largest stock market, severely restricted public access to market information, particularly its quotations. Markets and investors suffered from this lack of transparency.

Congress responded by enacting the Securities Acts Amendments of 1975. This Act empowered the SEC to facilitate the creation of a national market system for securities, with market participants required to provide information for each security, which in turn was to be consolidated into a single stream of information disseminated to the public.

Clearly there are costs associated with the collection and dissemination of this data, and Congress in the 1975 Act made clear that the cost of this public utility function should be recouped. As discussed above, exchanges should be able to charge for the reasonable and necessary costs of collecting, consolidating and disseminating market data. Like other public utility rates, those charges should not be limited to cost recovery, but should include a reasonable rate of return, determined by the regulator, on the capital allocable to gathering, consolidating and disseminating market data. While it is appropriate for the exchanges to cover costs, this doesn't change the underlying principle that market data is public property.

In recent years, the exchanges have been promoting database protection legislation that would give them a property right over market data. This runs counter to our historic information policy which constitutionally mandates that facts cannot be owned. Market data of the type under discussion is precisely the kind of factual information which cannot be owned. Treating this market data as anything but public property would violate longstanding principles of intellectual property law and vitiate the goals of the 1975 Act by undermining our ability to have a national market system.

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Questions for the Record
Submitted by Chairman Michael G. Oxley
Hearing on "Public Access to Market Data - Improving Transparency and Competition"
March 14, 2001

1. In one of the appendices to Mr. Knight's testimony, he states that non-SROs, like ECNs, market makers, specialists, broker-dealers, investors, and market data vendors, should have a voice in the operation of the market data Plans. But he also observes that "it is inconsistent with section 11A of the Exchange Act to allow non-SROs to participate directly in Plan governance." Why shouldn't Congress amend Section 11A to allow this?

A–As part of its comprehensive review of the Securities Acts Amendments of 1975, the Congress should indeed amend Section 11A to allow non-SROs a voice in the operation of market data Plans.

2. Ms. Dwyer points out in her testimony that third party vendors should be offered the opportunity to disseminate unconsolidated market data (including multiple levels of price and depth information). She suggests "let the exchanges compete with other market data vendors based on price and quality of services." Does anyone disagree?

A-We would concur with Ms. Dwyer. We'd stress that encouraging exchanges to compete fairly on the basis of price and quality of services will require Congressional attention to ensure that exchanges do not exploit their government-sponsored monopoly over market data. If exchanges are able to charge excessive rates for market data and use those monopoly rents to subsidize their competitive businesses, markets and investors will not only be over-charged for market data, but also deprived of the benefits that competition could bring to other markets. In addition, in order to promote the quality and timely delivery of market data, all market data vendors should be permitted initial access to the market data at the most advanced technological levels utilized by exchanges.

3. If third party vendors were permitted to do this, how could they compete against a market, such as the NYSE, that has 85 percent of the liquidity and therefore virtually all of the useful information anybody would want about the listed market?

A-If it is required that data be made available at the same cost and under the same terms to all interested market participants, then it will be possible to have competition – even with a market that enjoys as many formidable competitive advantages as the NYSE. Just as vendors may compete for unconsolidated market data, we believe exchanges should be free to provide value-added functionality, but only through separate legal entities that do not have the potential to be cross-subsidized by the activities of the exchanges as monopoly collectors, consolidators and disseminators of market data.

4. The Federal securities laws mandate that the terms for market data distribution be "fair and reasonable" and "not unreasonably discriminatory." Is this mandate effectively being enforced? What evidence do you have for your response?

A-This mandate is not being effectively enforced. The current system lacks the transparency that would be essential to ensure that terms are "fair and reasonable" and "not unreasonably discriminatory". As noted at the hearings, processors have often avoided public and regulatory scrutiny by instituting fee changes through "pilot" programs that were not filed with the SEC for review, approval and public notice and comment. We have urged the development of criteria for evaluating exchange fee proposals to ensure they are "fair and reasonable" and "not unreasonably discriminatory" as required by the Federal securities laws.

5. It appears that the current contracting process is unnecessarily complicated and results in high administrative costs to vendors and subscribers. Do you object to streamlining this process and making the resulting contractual terms uniform and public?

A–We support efforts to streamline the contracting process and increase its transparency. Even these modest steps would help protect investors by moving us toward a system of market data fees based solely on the cost of data collection and dissemination, as opposed to a system where fees are designed as a means of defraying other costs or as a means of unfairly cross-subsidizing competitive ventures.

6. Mr. Bell's testimony states that the 1975 securities amendments "crafted a regulatory and legal regime for a world without online brokerages, a world without ECNs, a world without modern communications systems, a world where exchanges were content to serve as not-for-profit public utilities." Why must the rules governing market data be updated?

A–The model Congress put forth in 1975 is in many ways fundamentally sound. However, as noted, bedrock changes in our markets over the past quarter century demand a thorough congressional reexamination of the 1975 Amendments, including the provisions on market data. The two most significant changes that demand an updating of rules governing market data flow from advances in technology and from the desire of the exchanges to become for-profit entities.

As a matter of public policy, government-sponsored monopolies should be created and maintained only when critical goals can be achieved in no other manner. It is possible that the goal of consolidating and disseminating market data required the creation of a government-sponsored monopoly given the technology existing in 1975. That is clearly not the case today in light of the dramatic advances in technology and reductions in communications costs. Today, the securities business is turning frequently to competing, redundant electronic systems instead of monopolistic, unitary service providers. Monopolies are not needed for most, if indeed any, of the functions related to the collection and dissemination of market information.

The transformation of the exchanges into for-profit entities also requires a fundamental reexamination of the rules governing market data. Congress visualized the market data function as a public utility function with strict regulation of these data-processing monopolies. While there has been abuse of this monopoly function even as not-for-profit entities, the transformation to for-profit status will increase the incentive for SROs to exploit their government-sponsored monopoly over market data by charging excessive rents and using those monopoly rents to subsidize their competitive business.

The SEC's recent decision to approve a proposal to create a government monopoly in bond data (the TRACE proposal) illustrates the importance of Congressional examination of not only equity market data, but also bond market data. Under the TRACE proposal, a soon-to-be for-profit entity is being granted a government-sponsored monopoly despite the existence of technology that obviates the need for a monopoly consolidator and despite the presence of private sector actors – including Bloomberg – who stand ready to provide the service competitively. The government should not be creating a monopoly when the technology exists for the free market to provide that service – and where private sector participants stand ready to provide that service. Likewise, the government should not be vesting this government sponsored monopoly in an entity that is in the process of becoming a for-profit company.

In short, for the sake of investors and the efficiency of our markets, the rules governing market data – both equity and bond – should be thoroughly re-examined.

MICHAEL G. OXLEY, OHIO, CHAIRMAN

U.S. House of Representatives
Committee on Financial Services
ONE HUNDRED SEVENTH CONGRESS
2129 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515

202-225-7502

March 15, 2001

The Honorable Laura S. Unger
Acting Chairman
Securities and Exchange Commission
450 5th Street, N.W.
Washington, DC 20549

Dear Acting Chairman Unger:

We are writing in connection with the March 14, 2001 hearing of the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises of the House Financial Services Committee on market data.

On July 25, 2000, the Securities and Exchange Commission announced the establishment of a federal advisory committee to assist the agency in evaluating issues relating to the public availability of market information in the equities and options markets. Joel Seligman, Dean of the Washington University School of Law in Saint Louis, chairs the Advisory Committee on Market Information. To supplement the record of our hearing on market data, we request that you provide the subcommittee with information on: (1) the membership of the Advisory Committee; (2) the issues that the Advisory Committee is charged to address; (3) how many times the Advisory Committee has met and the agenda for each meeting; (4) how many additional times the Advisory Committee is expected to meet; and (5) whether the Advisory Committee expects to meet the deadline for issuing a report and recommendations to the Commission on or before September 15, 2001. Additionally, please address whether you expect the Advisory Committee's report to provide information that would be helpful in the subcommittee's examination of issues related to market data.

In order to ensure that your response is made part of the hearing record, please reply to this request no later than March 30, 2001.

Sincerely,

Richard H. Baker
Chairman
Subcommittee on Capital Markets,
Insurance and GSEs

Paul E. Kanjorski
Ranking Member
Subcommittee on Capital Markets,
Insurance and GSEs

THE CHAIRMAN

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 29, 2001

The Honorable Richard H. Baker
Chairman
Subcommittee on Capital Markets,
Insurance and GSEs
U.S. House of Representatives
2129 Rayburn House Office Building
Washington, DC 20515

The Honorable Paul E. Kanjorski
Ranking Member
Subcommittee on Capital Markets,
Insurance and GSEs
U.S. House of Representatives
2129 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Baker and Ranking Member Kanjorski:

Thank you for your letter of March 15, 2001, which you wrote in connection with the March 14 hearing on market data held by the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises (the "Subcommittee") of the House Financial Services Committee. To supplement the record of the Subcommittee's hearing, you request certain information regarding the Securities and Exchange Commission Advisory Committee on Market Information (the "Advisory Committee").

The Securities and Exchange Commission ("Commission") formed the Advisory Committee to assist it in evaluating issues relating to the public availability of market information in the equities and options markets. Your letter asks for information regarding the Advisory Committee in five specific areas:

(1) Membership of the Advisory Committee. The Advisory Committee has 25 members, and is chaired by Joel Seligman, Dean of the Washington University School of Law in St. Louis and a distinguished scholar in securities regulation. The other members of the Advisory Committee represent a wide range of perspectives, and include exchanges, electronic communication networks (ECNs), broker-dealers, institutional investors, vendors, and other market participants, as well as the public at large. The current list of Advisory Committee members is attached as Annex A.

(2) Issues the Advisory Committee is Charged to Address. The Advisory Committee has a broad mandate to explore both fundamental matters, such as the benefits of consolidated market information, and practical issues such as how prices for market data should be determined. Specifically, the Advisory Committee will make recommendations to the Commission in at least six areas: (1) the value of transparency to the markets; (2) the impact of decimalization and electronic quote generation on market transparency; (3) the merits of consolidated market information; (4) alternative models for collecting and distributing market information; (5) how market data fees should be determined and evaluated; and (6) practical matters relating to the joint market information plans, such as appropriate governance structures and issues relating to plan administration and oversight.

(3) How Many Times the Advisory Committee has Met and the Agenda for Each Meeting. The Advisory Committee has met three times to date. At its first meeting, on October 10 of last year, the Advisory Committee focused on the most fundamental issues – the merits of transparency and consolidated information. The second meeting, on December 14, concentrated on several alternative models for consolidating and distributing market information that had been submitted by Advisory Committee members. At the third meeting, on March 1, the Advisory Committee focused on various ways to improve the current market data model in the equities markets. The agendas for these meetings are attached as Annex B. In addition, the Advisory Committee has formed a subcommittee to review alternative market data models in more depth. The subcommittee is chaired by Professor Donald Langevoort of the Georgetown University Law School, and has 10 members in addition to Professor Langevoort. The subcommittee met on March 26, and intends to meet again on April 16.

(4) How Many Additional Times the Advisory Committee is Expected to Meet. The Advisory Committee plans to meet three more times: on April 12; May 14; and July 19. At the April 12 meeting, the Advisory Committee will continue its discussion of the issues on the March 1 agenda – namely, various ways to improve the existing market data model in the equities markets. The May 14 meeting will return to the subject of alternative market data models. The final meeting of the Advisory Committee, on July 19, is expected to focus on issues relating to market information in the options markets.

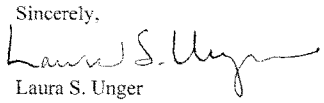
(5) Whether the Advisory Committee Intends to Meet its September 15 Deadline. The Commission has asked the Advisory Committee to issue its report no later than September 15 of this year. Dean Seligman repeatedly has stated that he is committed to meeting that deadline.

Finally, you ask whether I expect the Advisory Committee's report to provide information that would be helpful in the Subcommittee's examination of issues related to market data. I would expect the Advisory Committee's report to be quite helpful, not only to the Commission, but to others interested in reviewing market data issues. As noted above, the Commission has given the Advisory Committee a broad mandate to examine in depth the myriad issues relating the public availability of market information in the equities and

options markets. The Advisory Committee is comprised of a distinguished group of experts that represent a wide range of interests and, to date, they have devoted substantial time and effort to exploring these matters. Our hope is that the Advisory Committee will be able to achieve some consensus on the difficult, and oftentimes controversial, issues that surround market data. I have little doubt the Subcommittee will find the Advisory Committee's report to be educational and informative as it reviews market data issues.

I hope the foregoing provides you with the information you need. Please let me know if I can be of further assistance to you or the Subcommittee as you continue your work in this complex and important area.

Sincerely,



Laura S. Unger
Acting Chairman

Annex A

SECURITIES AND EXCHANGE COMMISSION
ADVISORY COMMITTEE ON MARKET INFORMATION
LIST OF MEMBERS

1. Dean Joel Seligman (Chairman)
   Washington University School of Law

2. Mr. Michael Atkin
   Vice President
   Software and Information Industry Association
   Financial Information Services Division

3. Mr. Harold S. Bradley
   Senior Vice President, Investment Management
   American Century

4. Mr. Robert G. Britz
   Group Executive Vice President
   New York Stock Exchange

5. Mr. Andrew M. Brooks
   Vice President, Head of Equity Trading
   T. Rowe Price

6. Mr. Matthew S. DeSalvo
   Managing Director
   Morgan Stanley Dean Witter

7. Ms. Carrie E. Dwyer
   General Counsel & Executive Vice President
   Charles Schwab

8. Mr. Joel Greenberg
   Managing Director
   Susquehanna Partners

9. Mr. William R. Harts
   Managing Director
   Salomon Smith Barney

10. Mr. David A. Hunt
    Partner
    McKinsey & Company

11. Mr. George K. Jennison
    Senior Managing Director, Retail Equity Group
    First Union Securities

12. Prof. Simon Johnson
    Sloan School of Management
    Massachusetts Institute of Technology

13. Mr. Edward J. Joyce
    President and Chief Operating Officer
    Chicago Board Options Exchange

14. Mr. Thomas M. Joyce
    Managing Director, Head of Equity Market Structures
    Merrill Lynch

15. Mr. Richard Ketchum
    Deputy Chairman and President
    Nasdaq

16. Prof. Donald C. Langevoort
    Georgetown University Law Center

17. Mr. Bernard L. Madoff
    Bernard L. Madoff Investment Securities

18. Mr. Mark A. Minister
    President & CEO
    Bridge Trading

19. Mr. Edward Nicoll
    Chairman and CEO
    Datek Online Holdings

20. Mr. Paul O'Kelley
    Chief Operating Officer
    Chicago Stock Exchange

21. Mr. Kenneth D. Pasternak
    President and CEO
    Knight/Trimark Group

22. Mr. Gerald D. Putnam
    Chief Executive Officer
    Archipelago

23. Mr. Peter Quick
President
American Stock Exchange

24. Mr. Eric D. Roiter
Senior Vice President and General Counsel
Fidelity Management & Research Co.

25. Mr. Devin Wenig
President
Reuters Information

Annex B

SECURITIES AND EXCHANGE COMMISSION
ADVISORY COMMITTEE ON MARKET INFORMATION

AGENDA FOR INITIAL MEETING
OCTOBER 10, 2000
1:00 P.M. – 5:30 P.M.
SEC HEADQUARTERS
WASHINGTON DC

I. Introductory Remarks (1:00 – 1:30)

Chairman Levitt
Dean Seligman

II. SEC Presentation (1:30 – 2:00)

Annette Nazareth/Bob Colby - Principles underlying current regulatory regime for market information

III. Presentations by Plan Administrators (2:00 – 3:00)

CTA/CQ Plan (NYSE); Nasdaq/UTP Plan (Nasdaq); OPRA Plan (CBOE) – Overview of current Plan operations

Break (3:00 – 3:15)

IV. Discussion of Fundamental Issues (3:15 – 5:15)

Presentation of each topic, followed by group discussion

A. Value of Transparency to the Markets (including possible ramifications of decimalization and electronic quote generation for utility of displayed quotes and trades)

B. Merits of Providing Consolidated Information to Intermediaries and Customers

V. Summary/Next Steps (5:15 – 5:30)

Dean Seligman

SECURITIES AND EXCHANGE COMMISSION
ADVISORY COMMITTEE ON MARKET INFORMATION

AGENDA FOR SECOND MEETING
DECEMBER 14, 2000
1:00 P.M. – 5:30 P.M.
SEC HEADQUARTERS
WASHINGTON DC

I. Introductory Remarks (1:00 – 1:15)

Dean Seligman

II. Presentation of Alternative Models (1:15 – 1:45)

NYSE Model; Reuters America Model; Schwab Model; Datek Online Model

III. SEC Issues (1:45 – 2:15)

Annette Nazareth/Bob Colby – Issues to be addressed, from an SEC perspective, with any alternative model

IV. Discussion (2:15 – 5:15)

Should the Committee proceed to attempt to develop an alternative model for disseminating market information, in addition to exploring ways to improve the existing model? Or should we focus solely on improving the existing model?

V. Summary/Next Steps (5:15 – 5:30)

Dean Seligman

Agenda for March 1 Meeting

I. Market Information that Vendors and Broker-Dealers Should Be Required to Provide to Customers

Current Rule: Under the Display Rule (Rule 11Ac1-2), a vendor or broker-dealer that provides market information to customers must include, at minimum, a consolidated quotation display and consolidated last sale display. Specifically, if quotation information is provided with respect to a particular subject security, the vendor or broker-dealer must include either the NBBO (the best bid and best offer, with size, from any reporting market center, and an identification of the applicable market center), or a quotation montage for the security from all reporting market centers. If transaction reports or last sale data are provided with respect to a particular reported security, the vendor or broker-dealer must include the price and volume of the most recent reported transaction, and an identification of the market center in which such transaction took place.

A. We could recommend retaining the current Display Rule requirements.
B. We could recommend increasing or reducing the minimum level of information that must be provided to customers under the Display Rule.
C. We could recommend eliminating the Display Rule, and relying solely on broker-dealers' best execution obligations and customer demand to determine the appropriate level of market information.
D. With respect to the provision of market information beyond the mandatory minimum, we could recommend that (1) it should be left relatively free from regulation or (2) any additional information should be provided in a consolidated format.

II. How Market Information Should Be Consolidated

Current Model: Under the Transaction Reporting Rule (Rule 11Aa3-1), each exchange is required to file with the SEC a plan for the dissemination of transaction information for listed equity and Nasdaq securities traded through its facilities, and the NASD is required to file a plan for the dissemination of transaction information for such securities executed by its members otherwise than on an exchange. These plans must address, among other things, the consolidation of information. In addition, every broker-dealer is required to transmit to any exchange of which it is a member or the NASD all information required by that SRO's transaction reporting plan.

Under the Quote Rule (Rule 11Ac1-1), each exchange is required to collect, process, and make available to vendors the best bid, the best offer, and aggregate quotation sizes for each subject security listed or admitted to unlisted trading privileges that is communicated on that exchange. The NASD is

required to collect, process, and make available to vendors the best bid, the best offer, and aggregate quotation sizes for each subject security communicated otherwise than on an exchange by any OTC market maker, as well as the identity of that market maker. In addition, every broker-dealer is required to promptly communicate to the applicable exchange or the NASD its best bids, best offers, and quotation sizes for any subject security.

The SROs have fulfilled their obligations under the Transaction Reporting Rule and Quote Rule by implementing the CTA, CQ, and Nasdaq/UTP Plans. Under these Plans, the Plan processors (SIAC for the CTA and CQ Plans and Nasdaq for the Nasdaq/UTP Plan) collect transaction and quotation information from each SRO Plan participant, and then consolidate and disseminate that information to vendors and broker-dealers.

A. We could recommend retaining the current model, with SIAC and Nasdaq acting as consolidators of market information pursuant to joint SRO Plans.
B. We could recommend retaining the existing joint SRO Plans, but making the exclusive consolidation function subject to active competitive bidding at the end of each contract term.
C. We could recommend dissolving the joint SRO Plans and having each exchange and the NASD file a separate transaction reporting plan, but retaining an exclusive consolidator of market information that would be selected through competitive bidding.[1]
D. We could recommend placing the obligation to provide market information to the exclusive consolidator on entities other than, or in addition to, the SROs (*e.g.*, market makers and ECNs).
E. At the same time, we could recommend allowing markets to make available their information separately, subject to the mandatory consolidation requirements of Section I.

III. Governance of the Consolidators

Current Model: Each of the existing joint SRO Plans is governed by an Operating Committee composed of one representative from each SRO participant. In general, a majority vote of the Operating Committee is sufficient to approve actions in accordance with the existing Plans, and a two-thirds vote is needed to adopt fee increases or new fees. Amendments to the Plans and other significant actions, however, generally require a unanimous vote of the Operating Committee.

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[1] Dean Seligman views multiple competing consolidators as outside the scope of "improving the existing model" of consolidating and disseminating market information. He expects to discuss this idea in depth at a subsequent meeting.

A. We could recommend that the existing mechanisms for determining user fees and allocating revenues among the SRO participants be retained.
B. If participation in Plan governance is broadened, we could recommend primary reliance on this governance process to set fees and allocate revenues, with backstop SEC oversight.
C. We could recommend a more precise standard for evaluating the fairness and reasonableness of fees (*e.g.*, a cost-based limit with specifications of appropriate costs) and for distributing market information revenues (*e.g.*, to fund more fully certain SRO functions).
D. We could recommend that each entity providing information to the central processor be permitted to negotiate fees for its market information directly and separately with the exclusive consolidator, subject only to backstop SEC oversight. (Our recommendations should include a discussion of the market power the larger market centers will have, and the ways in which pricing abuses can be avoided.)

V. Ancillary Matters

A. *Administrative Issues* – We could recommend ways to improve the operational efficiency of the joint SRO Plans to reduce the administrative costs of market data users. For example, we could recommend that the process of administering fee structures be made more efficient by standardizing and streamlining the agreements, policies, billing procedures, and reporting requirements that the various Plans apply to vendors, broker-dealers and subscribers.
B. *Technological Issues* – We could recommend technological improvements to the current system of consolidating and disseminating market information (*e.g.*, ensuring adequate capacity and improving the accuracy and reliability of the market data stream). We also could recommend ways to promote technological innovation.
C. *Pilot Programs* – Some have expressed concern that the Plans have used their "pilot program" provisions to implement fee structures for periods of time beyond that which the provisions originally were intended to cover. We could make recommendations on whether pilot programs should continue and, if so, whether improvements should be made.

Of course, each SRO is required by the Exchange Act to assure a fair representation of its members in the selection of its directors and the administration of its affairs, and to have one or more non-industry directors. Under the current model, therefore, these broader constituencies have some degree of indirect influence over the actions of the various SRO Plans.

A. We could recommend that the existing composition and voting requirements of the Operating Committees be retained.
B. We could recommend that the composition of the Operating Committees, or other Plan committees, be broadened to include representatives of other constituencies (*e.g.*, vendors, broker-dealers, public investors).
C. We could recommend that the voting requirements of the Operating Committees be modified (*e.g.*, permitting Plans to be amended with a majority or two-thirds vote).
D. Our recommendations on governance should ensure that new market entrants are admitted to the Plans on fair and reasonable terms.

IV. How User Fees are Determined and Revenues Allocated Among Plan Participants

Current Model: The Exchange Act grants rulemaking authority to the SEC to assure that (1) all SIPs may obtain market information from an exclusive processor of that information on terms that are "fair and reasonable" (Section 11A(c)(1)(C)), and (2) all persons may obtain market information on terms that are "not unreasonably discriminatory" (Section 11A(c)(1)(D)).

The user fees charged by each SRO Plan for its market information typically are negotiated with vendors, broker-dealers, and other users. Because these fees must be filed with the SEC as proposed rule changes, and are subject to public notice and comment procedures, interested parties may submit their views on proposed fees directly to the SEC if negotiations have not led to a mutually satisfactory result.

Under the CTA and CQ Plans, after payment of operating expenses, fee revenues are distributed among the SRO participants in accordance with their proportional share of total transaction volume. Under the Nasdaq/UTP Plan, after payment of operating expenses, revenues are distributed among the SRO participants based on an average of the percentage of total transaction volume and the percentage of total share volume, subject to certain floors and caps.

Of course, our recommendations in this area will apply only to market information that is required to be provided to customers. Fees and revenue allocations for information beyond the mandatory minimum will be determined by market forces, subject only to backstop SEC oversight.

WRITTEN STATEMENT OF GERALD D. PUTNAM, JR.
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
ARCHIPELAGO HOLDINGS, L.L.C

CONCERNING

PUBLIC ACCESS TO STOCK MARKET DATA - IMPROVING TRANSPARENCY AND COMPETITION

COMMITTEE ON FINANCIAL SERVICES

SUBCOMMITTEE ON CAPITAL MARKETS, INSURANCE, AND GOVERNMENT SPONSORED ENTERPRISES

UNITED STATES HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

MARCH 14, 2001

Good morning Chairman Oxley, Chairman Baker, Vice-Chairman Ney, Ranking Member Kanjorski, and members of the Subcommittee. I am Jerry Putnam, co-founder and chief executive officer of Archipelago Holdings, L.L.C. ("Archipelago"). On behalf of my staff and Archipelago's investors, I thank the Subcommittee for the opportunity to appear before you today to discuss market data, an important subject that fully deserves your consideration.

I. In The Beginning....

In late 1996, I founded Archipelago along with software developers MarrGwen and Stuart Townsend. Today, it is a leading electronic communications network ("ECN"), whose owners include Goldman Sachs, E*Trade, J. P. Morgan-Chase, Instinet, Merrill Lynch and CNBC. Archipelago serves a diverse client base and executes over 100 million shares per day, or roughly 6% of all volume reported to The Nasdaq Stock Market, Inc. ("Nasdaq"). Archipelago is the only ECN to trade exchange-listed shares in the National Market System ("NMS") through ITS/CAES. Beginning only a short 6 months ago and growing rapidly since that time, our exchange-listed business is currently about 8 million shares of volume per day.

Last year, Archipelago entered into a business alliance with the Pacific Stock Exchange ("PCX") to create the Archipelago Exchange: the first fully open, electronic national securities exchange for both listed and over-the-counter securities. The Archipelago Exchange will be fully integrated into the NMS and will compete toe-to-toe with the New York Stock Exchange, Inc. ("NYSE" or "Exchange") and Nasdaq. Our trading rules, which reflect the market structure of the exchange, were published in the Federal Register by the Securities and Exchange Commission ("SEC") in December 2000, and we recently submitted to the SEC our responses to letters commenting on our rules. I can happily report that the bulk of these comment letters

support our efforts to create a "new breed" of stock exchange.

That notwithstanding, we have now entered into challenging, if spirited, negotiations with the National Market System Plans ("NMS Plans"). Successful entry into the NMS Plans as a full participant is a sine qua non to launching an exchange and, thus, creates a substantial barrier to entry. In the end, however, with plenty of elbow grease and good fortune, we trust that the Archipelago Exchange will be the first for-profit, technology-driven exchange that levels the playing field for all investors by combining greater transparency, faster speed and lower cost.

II. Importance of Market Data: "The Life Blood of Markets"

Former SEC Chairman Arthur Levitt has called market data "the lifeblood of markets." In addition, before this very Subcommittee two years ago, the SEC's Annette Nazareth testified that "...[A] market can be defined most simply as the exchange of information about the buying and selling interest in a product – in particular, quotations as to the price and size at which buyers and sellers are willing to trade.... A market's quality depends on the extent to which this information is timely, comprehensive, and reliable."

The central tenet of our exchange model is full and timely transparency. Today as an ECN, we "pull" price data from all exchanges and ECNs for the purposes of finding the best price for our customers, and "push" full depth of book information to a wide audience of investors and market professionals via multiple outlets, including the Internet. [1] Since the recent

[1] Archipelago provides a "consolidated" ECN limit order book, including full depth of bids and offers from the Island ECN, RediBook ECN, and Archipelago's own ECN on our website (www.tradearca.com). We strive to be a manifestation of former Chairman Levitt's entreaty to the securities industry that "[n]ow is the time for all market participants to move toward open books across all markets. Now is the time for a voluntary private sector initiative in this important area -- one that does not require major systems engineering." *Visible Prices, Accessible Markets, Order Interaction*, Arthur Levitt, Northwestern University School of Law, March 16, 2000. Further, Archipelago gives that same information at no cost to clients, vendors, and websites who elect to receive it.

onset of decimalization, the ability to view full depth of book data has become quintessentially important to our clients, and the marketplace as a whole, because armed with a more complete picture of supply and demand interest, they are in a position to make better, more informed trading decisions. As you might surmise, market data and its transparency play a critical role in our business.

Today, equity market data is controlled by a government-mandated, anachronistic and static structure: the NMS Plans. Although organized with good intentions and noble purpose, we respectfully submit that the NMS Plans – the CTA/CQ Plan for listed securities and the OTC/UTP Plan for Nasdaq securities – must be fundamentally improved. In particular, the Plans are exclusive providers: any vendor or broker-dealer that supplies data to the investing public must contract with the Plans. Further, the Plans engage in ratemaking, albeit subject to the oversight of the SEC. Surely, the words "exclusive" and "ratemaking" raise eyebrows in a world that has so benefited from prudent deregulation, and represent an incongruity in a discussion of U.S. capital markets, which are so fiercely competitive and efficient.

Regrettably, market forces neither impact the Plans nor provide incentives to offer competitive rates and services. Instead, vendors and broker-dealers are presented with a classic Hobson's choice: do business based on monopolist terms or do no business at all. In this sub-competitive environment, valuable market data is sold to vendors and broker-dealers and then distributed to millions of retail and institutional investors at prices set by the Plans. And, guess who picks up the tab for the inefficiencies caused by Plan "planning" … investors do!

Without competitive forces to discipline markets, economic distortions naturally result. No one really knows if market data fees are too high or low (though many economists suggest

too high). What we do know is that prices are not tied to value. More troubling is the fact that the business of providing innovative data is not rewarded. Exchanges have little incentive to bring new and superior data products to market because data dissemination is regulated by a "Vendor Display Rule"— a one-size-fits-all mandate. [2]

III. Hazing the Pledges, NMS Style

As alluded to earlier, Archipelago is currently negotiating with the NMS Plans, in essence, to join an exchange fraternity. Absent acceptance and due initiation, we are barred for life from doing business as an exchange. Ironically, the most difficult task about creating a new exchange is not the enormous time and expense of drafting 700 pages of rules, or responding to public comment letters, or regulators, or clients about market structure and other esoterica. Instead, the most difficult hurdle, or "barrier to entry" in the parlance of economists, is the hazing process that a new entrant must endure to be granted membership in the NMS fraternity—a fraternity composed exclusively of competitors. As with all fraternities, a single blackball veto serves as the ruling principle of governance. Any single competitor has the authority to prevent or condition the terms of entry for would-be exchanges.

Our recent negotiations to enter the ITS Plan serve as a real-time illustration of these actual conflicts of interest. [3] Our staff was recently told by the NYSE staff that the Exchange

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[2] Exchange Act Rule 11Ac1-2, 17 CFR 240.11Ac1-2. The Vendor Display Rule, which applies to market information generated in the stock markets, requires, among other things, that vendors disseminate last sale reports and quotations in a particular security from *all* registered exchanges trading (consolidated data) that security and any NASD members acting as market makers in that security. Whether or not consolidated date is important, whether or not the end user ultimately wants consolidated, a vendor under the Vendor Display Rule *must* provide a service and product that contains consolidated data. Choice and market forces are not applicable.

[3] The ITS Plan governs the *computer* routing network that links its nine current participants: NYSE, AMEX, Boston Stock Exchange, Chicago Stock Exchange, Cincinnati Stock Exchange, Pacific Stock Exchange and Philadelphia Stock Exchange, Chicago Board Options Exchange, and the NASD. Essentially, the system enables market professionals to interact with their counterparts in other markets whenever the nationwide Consolidated

"interprets" the ITS Plan to severely limit the ability of participants to use "computers" to place orders into ITS. The Exchange forcefully suggested that we reconfigure our market structure to include an artificial time "probe," whereby the Archipelago Exchange would "hold-up" an order for a pre-determined period of time—such as 15 or 30 seconds—before attempting to access quotations displayed by another exchange. The purpose of this "hold-up" would be to allow a market maker to manually interact with the order. Our clients have unambiguously told us that they do not want to be "held up" by any time probe.

We do probe our marketplace, but we do it electronically, and we have in great detail elaborated on that point throughout our negotiations with the NYSE. With due respect to them and their formidable business model, our view is that asking us to insert an artificial time probe is a bit like asking us to change our stripes to look more like the NYSE—except without its market share of 85% or its 208-year head start. Because the NYSE was a founding member of the ITS fraternity and, therefore, is in possession of the blackball veto that can arbitrarily terminate our candidacy to join, Archipelago is presented with an "adhesion contract": sign the dotted line and join the frat house, but at the great cost of surrendering our volition to construct our marketplace in the manner we so choose (and, of course, subject to and in accordance with SEC regulations and approval) to satisfy the explicit demands of the NYSE. Under this scenario, we compromise our underlying value proposition of speed and electronics, alienate our customers, and undermine our business. Alternatively, we can walk away from the table and eschew signing the NYSE's demands, stand our principled ground, remain an ECN, and suffer the consequences of a lifetime bar from the exchange business. From our perspective, either way

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Quote System (see below) reflects a better price to prevent intermarket "trade throughs."

– pledge or not – we get the "paddle" from the fraternity brothers (our competitors). [4]

The CTA fraternity, too, has presented us with a similar dilemma in connection with our desire to keep the ticker tape open until 8 PM (ET). [5] (Currently, the ticker tape shuts down at 6:30 PM (ET)). The Archipelago Exchange will be open between 8 AM and 8 PM, and we believe it is critically important that investors have real-time access to transparent market data while we operate, particularly outside traditional market hours. In accordance with proper procedure, we formally made a request of the CTA on August 16, 2000, to extend its hours in anticipation of our hours of operation. Since that date, we have been diligently working with the CTA to extend hours, but progress has been limited. Instead of a typical vendor relationship, in which a for-profit entity competes for the business of delivering our data to the public, like in the ITS twilight zone, we are compelled to negotiate with our competitors. It should come as no great surprise that when we launch this summer (2001), the consolidated tape will close at 6:30 PM while we continue to trade until 8 PM. As the CTA continues to "negotiate" and analyze and otherwise dither with us, investors are again left holding the bag as they will be deprived of valuable market data.

A. Never-Ending Hell Week

The existence of a never-ending "hell-week initiation" as a precondition to admittance is unthinkable in any other business. Consider, for instance, if American Airlines—under color of

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[4] It is worthy of note that the NYSE, *sua sponte*, had representatives of Archipelago removed from the most recent ITS meeting (expelled from the fraternity house) in February 2001, based on "antitrust concerns." As stated above, Archipelago currently executes about 8 million shares of listed shares per day via ITS/CAES, which represents a fraction of a fraction of average overall listed volume.

[5] CTA refers to the intermarket plans of the Consolidated Tape Association and the Consolidated Quotation System (CQS). CTA is the administrative body that oversees the administration, collection, processing and distribution of market data relating to exchange listed stocks. In contrast, the OTC-UTP Plan serves the same function in connection with over-the-counter stocks.

FAA authority—were permitted to direct United Airlines that United would no longer be in regulatory compliance if its pilots used a computerized autopilot system, because American had made a business decision not to use computers. Unless United agreed to turn off its computers, American's business would be severely threatened. As a consequence, domestic air travel would be deprived of a cost-saving innovation, fares would be kept artificially high, and passenger safety would potentially be put in jeopardy. Fortunately, this incredulous tale is just that, a tale: instead, business and leisure travelers fill our airports today because competition has reduced fares to an unprecedented low. Without question, investors in equities should enjoy similar benefits.

At the end of the day, we seek nothing more than the opportunity to get our exchange "to market" and allow the marketplace, and not fraternity houses, determine whether our ideas, market structure, and electronic system will stand on their own business and regulatory merits. Our stated goal is not to put the established exchanges out of business. Instead, we believe that a certain clientele of investor prefers an electronic model to the traditional exchange "floor" model. Different investors and market professionals have different preferences; and like any other market, ours is highly segmented. We just want a fair shot.

IV. Suggested Market-Based Solutions

We respectfully suggest an overhaul to the current system. Such an overhaul would cast sunshine on "ancient fraternal rites" and inject competition to allow simple economics to take its rightful role in the collection and dissemination of market data.

First, competition among marketplaces must replace ratemaking by a committee of competitors to provide value, and vendors must be allowed to pay for data based on that value.

Instead of forcing vendors to contract with an NMS utility, we should permit vendors to contract with any number of marketplaces directly and let marketplaces sell data to vendors at prices that the market will bear. To be clear, we are not suggesting a model that fixes the value of data at cost. This type of experiment, in which the cost of supply is unregulated while the associated revenue is etched in stone, is what we believe the root cause of the current power troubles in California. Instead of partial or quasi-deregulation, Archipelago supports a model that enables marketplaces to sell data to vendors at prices that the market will bear.

Second, the types of data that a marketplace is permitted to sell to should not be regulated. Rules that prevent or disincent a marketplace from providing additional value, such as full depth of book, have no place in securities regulation. The marketplace should arm investors with more information, not less.

Third, while we are true believers in competition, prudence suggests a transition period under which the NMS utilities would continue to function. These utilities can help ensure a "soft landing" as we move to a fully competitive model, so that consolidated information is not lost before new consolidators have the opportunity to build businesses. We expect the NMS utilities "to wither on the vine" as more adept competitors enter the marketplace.

Finally, NMS Plan participants should be barred from using "fraternity rules" as a license to affect the business models or value propositions of potential entrants. Plan participants must be continually mindful that their mandate in no way includes determining the market structure of new exchanges. If necessary, the Plans should take action to change their governance to reduce the potential for conflicts of interest, whether unwitting or intentional. The SEC must be vigilant in protecting against the misuse of NMS Plans to deny investors innovative marketplaces.

V. NMS: A Brighter Tomorrow Based On Competition

Although founded on lofty and noble principles, our national market system is in need of a vigorous modernization because its current structure restricts competition and, ultimately, harms investors. The time has come to unshackle market data from this sub-competitive structure. Archipelago looks forward to working with the Subcommittee throughout its review of the many changes occurring in today's capital markets. I thank you again for the opportunity to present our viewpoint to the Subcommittee.

ARCHIPELAGO PROPOSAL TO MODERNIZE THE NATIONAL MARKET SYSTEM

"Sunlight is the best disinfectant; electric light, the best policeman." - L. D. Brandeis

"We propose to move faster." - H. P. Long, Jr.

I. INTRODUCTION

Throughout the 1960s, both Congress and the Securities and Exchange Commission ("SEC" or "Commission") struggled with the lack of informational linkage between trading venues for securities listed on a National Securities Exchange ("Exchange"), or traded over-the-counter ("OTC") under the regulatory auspices of the National Association of Securities Dealers, Inc. ("NASD"), the lone National Securities Association ("NSA"). [1] The OTC marketplace operated without formal, automated linkage, and trading in Exchange-listed securities occurred in multiple locations without regard to all available prices. [2] As a solution to these problems of fragmentation, the notion of a National Market System, or "NMS," to link trading venues—in terms of both a market information linkage and a regulatory structure—was borne.

To build the NMS, Congress amended the Exchange Act in 1975 to erect a system of market linkages that would assure: fair competition among broker-dealers and exchanges; investor access to quotation and transaction information; and, the ability of brokers to execute investor orders in the best market. [3] During the years that followed, market participants worked with the Commission to create a number of inter-market plans in furtherance of the NMS vision–including the Intermarket Trading System ("ITS"), the Consolidated Tape/Quote Association ("CTA/CQ"), and the NASDAQ/National Market System/Unlisted Trading Privileges Plan ("OTC-UTP"). In addition, a new entity was added to buttress the new NMS structure: the Securities Information Processor ("SIP").

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[1] Exchanges and NSAs register and operate as self-regulatory organizations ("SROs") in accordance with Sections 6 and 15A of the Securities Exchange Act of 1934 ("Exchange Act"), respectively.

[2] The Commission remedied deficiencies in the OTC marketplace by calling for the creation of the NASD Automated Quotation system ("NASDAQ") that was completed by the Bunker-Ramo Corporation, on behalf of the NASD, in 1971. (See Report of Special Study of Securities Markets, SEC, 1963 ("Special Study") (discussing the deficiencies of the OTC marketplace before NASDAQ.)) NASDAQ now provides informational linkage for over 5,200 OTC securities. For the purposes of this document, the term "OTC security" shall refer to a NASDAQ-listed OTC security.

[3] Section 11A(a)(1)(C) of the Exchange Act.

For over twenty years now, little about these plans has changed or progressed, despite enormous marketplace change and revolutionary advances in technology that afford many opportunities for substantial improvements. Without question, the time has come for a fundamental review of NMS-related structures to assure that these pose no competitive or technological constraints on an effective NMS, the benefits of which directly accrue to the investing public.

Archipelago, L.L.C. ("Archipelago") believes that the NMS concept remains as fundamentally sound as it was 1975, but that the associated plans and structures need substantial improvement. [4] Below, Archipelago sets forth a high-level design for an improved NMS for both Exchange-listed and OTC securities ("Archipelago Proposal" or "Proposal"). The Proposal, we believe, maintains the baseline benefits of the current NMS structure, but builds on the status quo by serving investors through: (1) eliminating the troubling conflicts of interest inherent in today's NMS structures; and, (2) encouraging innovation and competition. The resulting improvements will directly benefit investors by reducing trading costs, improving transparency, and increasing market efficiency.

The Archipelago Proposal is structured as follows: first, it sets forth a broad outline of a next-generation NMS; second, it addresses and analyzes in detail the specific components thereof; and, third, it establishes the implementation necessary to change the marketplace for OTC securities. [5]

II. THE ARCHIPELAGO PROPOSAL: GENERAL FRAMEWORK

Under the Proposal, the NMS provides a framework wherein competing market centers reflect trading interest through quotations and access the quotations of other participant market centers. Moreover, the NMS gives multiple venues the ability to obtain and sell market information, thus giving rise to competitively-determined market data rates. To preserve the integrity of the marketplace, participants must adhere to established rules of just and equitable principles of trade, as promulgated—and enforced—by both the NMS and SEC.

Figure 1 illustrates the general structure for the proposed national market system, including linkage and participation.

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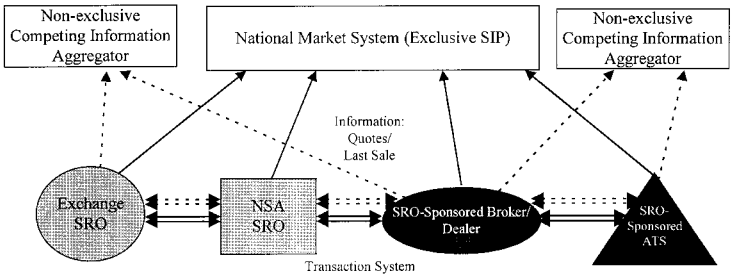
[4] Archipelago is a broker-dealer that operates an electronic communications network ("ECN"). Archipelago currently executes nearly 5% of volume transacted in OTC securities and participates in NMS structures for Exchange-listed securities via the NASD.

[5] Although it applies to both Exchange-listed and OTC securities, the Proposal suggests an implementation approach for OTC securities because that marketplace is currently embroiled in controversy that should be addressed as soon as possible. See Section V, infra. As Archipelago refines its Proposal, we will provide detailed suggestions relating to implementation for Exchange-listed securities.

Figure 1: Proposed National Market System



The next-generation NMS would be based on five guiding principles: (1) transparent information; (2) neutral control and workable governance; (3) effective regulation; (4) open participation; and, (5) incentive-driven technological deployment.

1. Transparent Information. Under the Proposal, an exclusive securities information processor ("Exclusive SIP") collects information, at least until such time as such an entity is no longer necessary to assure information consolidation. Like today, all market centers that trade a security covered by an NMS plan will be required to submit real-time best quotation (or "top of book") and last-sale information to the Exclusive SIP associated with that plan (denoted by single solid lines in Figure 1). [6]

Unlike today, however, market participants would also be permitted, if not encouraged, to disseminate this information—and, perhaps additional information, such as full depth of book—to a non-exclusive, competing information collector ("Information Collector") (denoted by single dotted lines in Figure 1). Information Collectors would be permitted to purchase information from market participants at market-determined rates and, in turn, to sell such information to vendors at market-determined rates, based on the value of the information.

Although the Exclusive SIP would, in essence, compete with Information Collectors, any information collected through the Exclusive SIP network would be disseminated to all market participants on a non-discriminatory basis, including competing Information Collectors. Further, the ability to contract for information above and beyond last sale and best quotation information—the purview of the Exclusive SIP—would provide a valuable incentive for Information Collectors. Indeed, a number of entities have already begun to provide this type of service to the OTC marketplace as

[6] Pursuant to Rule 11Ac1-1 under the Act.

vendors. [7]

In addition, the Exclusive SIP would be responsible to supply a linkage system to access market participant quotations (denoted by double solid lines in Figure 1). This system would serve to preserve the integrity of quotations and facilitate trading among market centers. In addition to the Exclusive SIP-sponsored linkage system, market participants would be permitted to build proprietary transaction linkages outside of the Exclusive SIP linkage system (denoted by double dotted lines in Figure 1). Such linkages assure redundancy and eliminate "single point of failure" deficiencies of anachronistic hub-and-spoke models. [8]

2. Neutral Control and Workable Governance. A committee, consisting of any SRO that agrees to terms of membership in the NMS plan and participation in the Exclusive SIP, would govern the operations thereof ("Governing Committee"). The Governing Committee will be responsible for establishing marketplace rules, including existing and future SEC rulemaking, as well as designating the technology provider. [9] To prevent a single market center from controlling or limiting development for purposes of parochial ends, the Governing Committee would operate on a majority vote basis; no participant would anointed with veto power by way of a unanimity requirement for plan action.

3. Effective Regulation. Surveillance and enforcement of NMS rules would be handled by a combined effort of participant SROs and the Commission. Regulatory business would be conducted on a self-policing, real-time basis, with SEC involvement where appropriate.

4. Open Participation. All market centers that directly participate in the NMS would have to designate SROs to govern compliance with SEC and plan rules. In other words, an ECN, alternative trading system ("ATS"), or market maker may participate directly in the NMS provided that an SRO "sponsors" that entity by regulating the NMS participation of the sponsored entity. [10]

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[7] For example, Yahoo! Finance (http://finance.yahoo.com/), Quotezart (http://www.quotezart.com/), and 3DStockCharts (http://www.3dstockcharts.com) provide real-time, full depth of book for a number of ECNs.

[8] In this connection, a number of ECN and market maker participants in the OTC marketplace have built such linkages, which have afforded participants the ability to continue trading during NASDAQ outages. (See Letter from Gerald Putnam, Chief Executive Officer, Archipelago, to Arthur Levitt, Chairman, SEC, dated December 16, 1999)(citing well-documented NASDAQ technological problems, available at http://www.tradearca.com/news_and_views/viewpoints/viewpoint_121699.pdf).

[9] Archipelago envisions a limited set of rules for participation in the NMS, such as provisions for timely trade reporting, firm quotes, and decimal quotation increments. To preserve competition and innovation, plan rules should not be business-model specific.

[10] Traditionally, the NASD has provided this sponsorship function for market maker and ECN participants in the OTC marketplace. Indeed, as detailed in Section V, infra, an NASD affiliate, NASDAQ,

5. Incentive-Driven Technological Deployment. The Governing Committee would delegate the information and linkage responsibility to a technology provider ("IT Provider"). To ensure that the IT Provider would maintain an efficient, reliable, and cost-effective system, the Governing Committee would solicit competitive bids and select the best respondent in terms of both cost and functionality. In addition, the Governing Committee would periodically audit and evaluate the performance of the IT Provider. As with any other business, the Governing Committee would stand ready to review and accept any proposal to terminate and replace the current IT Provider for reasonable cause, notwithstanding contractual obligations.

III. DETAILED DESCRIPTION: COMPONENTS OF NMS FRAMEWORK

A. Exclusive SIP and Governing Committee

Under the Proposal, there would be a single NMS plan and Exclusive SIP for each security listed on an Exchange or NSA. [11] The NMS plan and Exclusive SIP would be operated by a Governing Committee, which would be responsible for: (1) NMS marketplace rulemaking; (2) enforcement of marketplace rules; and, (3) technology and information linkage.

The Governing Committee would design and propose rules that govern all trading between market centers participating directly in the Exclusive SIP. [12] The Governing Committee would submit all rule changes to the Commission for approval, subject to the standard public notice and comment period. [13]

With "rules" come the need for enforcement and its associated apparatus; the

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acts as Exclusive SIP for OTC securities. Accordingly, the NASD—or its regulatory affiliate, NASD Regulation, Inc. ("NASDR")—could provide sponsorship services to non-SRO NMS participants, as could the traditional Exchange SROs. Because sponsors could collect sponsorship fees or other consideration, Archipelago anticipates that a number of SROs would provide sponsorship services at competitively-determined rates.

[11] Archipelago envisions either a single NMS plan to cover all Exchange-listed and OTC securities or a separate NMS plans for each listing venue. Archipelago understands that NASDAQ seeks to exempt OTC securities that would be listed on a future "NASDAQ Exchange" from participation in CTA/CQ and ITS, implying that it favors a series of NMS plans based on listing venue. (See letter from Robert Britz, Group Vice President, New York Stock Exchange, Inc. ("NYSE"), to Richard Ketchum, President, NASDAQ, dated October 17, 2000.) Interestingly, the NASDAQ position implies that all OTC securities would list on the "NASDAQ Exchange," which leaves unanswered the question of how the NASD would intend to fulfill its Congressional and SEC mandate to organize the OTC marketplace, as set forth in 1963 via the Special Study.

[12] Exclusive SIP rules would be equivalent—in nature—to the current ITS/CTA/CQA and NASDAQ marketplace (NASD Rule 4600-series) rules.

[13] Intermarket plans are held to this standard today.

absence of such a framework would render Governing Committee rulemaking and rules meaningless. Two options for inter-market regulation are feasible. First, the Governing Committee could designate a single regulator, giving it jurisdiction over all inter-market transactions, including those affected by way of NMS linkage as well as external competing linkages.

Alternatively, each participating SRO could be responsible for regulating its own compliance with NMS rules, in addition to the compliance of any counterparty SRO in inter-market transactions. If a participating SRO determines that another market center is not complying with NMS rules, the SRO could attempt to resolve the conflict with the violating SRO. [14] Failing resolution, the SRO would refer alleged violations to the SEC for further action. Archipelago believes that, at present, the latter option is more feasible. [15]

The Governing Committee would be responsible for designating the IT Provider. This entity would be obligated to implement the technology functions required by the Exclusive SIP: information collection and transaction linkage. To ensure a highly efficient and low-cost linkage provider, the Governing Committee should request competing bids from a number of technology providers. These bids should consist of a detailed description of its proposed architecture, system capacity, and cost, among other factors deemed relevant by the Governing Committee.

The chosen IT Provider would be required to meet explicit initial and ongoing standards (as outlined in Section III.D). In addition, the Governing Committee would be required to revisit the performance of the technology provider on a regular periodic basis, perhaps once every two years. During the reevaluation process, the Governing Committee would examine proposals from potential new technology providers vis-à-vis the current provider. This process would inject a competitive environment for Exclusive SIP technology and would serve to maintain a high standard for the NMS technology. The result: processing costs would be contained, as would market data fees.

B. Competing Information Collectors

The NMS would incorporate provisions to enable competitive Information Collectors to develop. Although all market participants would be required to represent their best prices and last-sale information in the NMS, market participants would also be permitted, if not encouraged, to supply information to competing Information Collectors.

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[14] In the case of non-SRO participants, the sponsoring SRO would be responsible for the foregoing activities.

[15] Unfortunately, with the creation of the "NASDAQ Super Montage" while at the same time NASD remains the largest shareholder in NASDAQ, every SRO will be affiliated with an execution venue. Consequently, today no SRO is able to serve as neutral arbiter of inter-market disputes and NMS regulator. Were NASD to completely divest itself of its interest in NASDAQ, however, it may be possible for the NASD and/or NASDR to provide the requisite neutrality.

The Information Collectors would be permitted to sell any information they collect from trading venues at competitively-determined prices. [16] Accordingly, Information Collectors would have economic incentives to improve information dissemination and content relative to the Exclusive SIP. [17] This would lead to price availability beyond the Exclusive SIP should the Exclusive SIP fail to provide all information sought by investors or market professionals. [18] Likewise, the existence of Information Collectors would encourage the Exclusive SIP technology provider to maintain high standards for information collection and distribution.

The Archipelago Proposal establishes a dynamic system of competing Information Collectors who almost certainly would make the Exclusive SIP unnecessary in the not too distant future; provided, however, that information is not fragmented or degraded in any way because of the elimination of the Exclusive SIP. Further, Archipelago believes that a transition period is appropriate in light of the dynamic economics of information revenue. Indeed, if any single participant were to maintain a near-monopoly of informational content associated with securities subject to an NMS plan, rapid deregulation would have deleterious effects on smaller participants.

C. Non-SRO Participation in NMS

A non-SRO market center would be permitted to display quotation information directly in the Exclusive SIP if it so wished. The SRO medallion should not be a prerequisite to freely display and make accessible trading interest via the NMS. That said, displayed NMS interest, and interactions therewith, must be held accountable and be accorded standardized regulatory treatment. An SRO functions to ensure regulatory accountability for all information represented under its moniker. Consequently, an NMS-participant SRO could appropriately sponsor any non-SRO market center that participates directly in the NMS. The designated SRO would be accountable for any market center that it sponsors.

Archipelago believes that SROs will have considerable incentives to sponsor non-SRO NMS entrants because of the ability to collect fees for this service. In this way, regulatory services would be financed based directly on value provided, in contrast to an information revenue cross-subsidy. Indeed, through its relationship with the International

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[16] Importantly, because Non-Exclusive SIPs can derive revenue from sale of data, they would likely proportionally allocate this revenue to the market participants according to the informational value of each. Accordingly, market participants would derive revenue from both the Exclusive SIP and Non-Exclusive SIPs, conditional, of course, on the economic value of that participant's information. Unlike today's revenue sharing schemes, such a competitive market for information would reward those market participants that create informational value without subsidizing those that do not.

[17] Although the Archipelago Proposal contemplates no limits on the content, cost or timeliness of information disseminated by Information Collectors, Archipelago believes enforcement by the Department of Justice and the Federal Trade Commission against predatory pricing practices would prevent market centers from using pricing and/or speed to illegally disadvantage certain classes of information consumers.

[18] As described earlier, this is currently the case in the OTC marketplace. Supra note 7.

Securities Exchange, L.L.C., NASDR has illustrated that regulatory services have considerable economic value.

Importantly, sponsorship need not mean technology provision. To the contrary, the Exclusive SIP would provide means of access to the sponsored non-SRO participant directly, unless the non-SRO chose to receive information and access via the SRO sponsor. The SRO sponsor would, of course, reserve the right to instruct the Exclusive SIP to discontinue the sponsored entity's access in the case of violations of NMS rules or at termination of the sponsorship relationship.

Finally, consistent with the SEC Order Handling Rules and Regulation ATS, any market maker or ATS that is not a sponsored participant in the Exclusive SIP must represent all eligible interest via an SRO, which will then reflect orders in the NMS.

D. NMS Technology

The IT Provider would be required to meet minimum standards to be selected as the official provider:

1. The IT Provider would be required to have systems capacity and architecture to receive full depth of book from all participating market centers. Although market centers would not be required to reflect such information, market centers should have the option to reflect additional information. Indeed, full depth of book has become de rigueur for the past four years; creating an Exclusive SIP without the ability to collect complete information would represent a "giant leap backward."

2. The IT Provider would be required to attribute each participant quotation, irrespective of sponsorship (i.e., a sponsored entity receives attribution). Quotation attribution is crucial for several reasons. First, liquidity providers derive perceived value from a public advertisement of wares, which can lead to additional order flow. Second, attribution enables competing linkages to develop. If quotations were not attributed to market centers, no market participant would know who is reflecting the best price and, therefore, could only access the reflected order through the Exclusive SIP. [19] Third, quotation attribution enables competing Information Collectors to assign different economic values to information from different participants based on the quality of each participant's quotations.

3. The linkage system would be based on a highly-automated order delivery framework, as opposed to an execution delivery scheme. Without an order

[19] Indeed, robust quote competition has been a clearly stated goal of the SEC and many market participants for a number of years. See, e.g., Arthur Levitt, "Toward Markets Driven By Footsteps," Speech at Securities Traders Association, October 12, 2000 available at http://www.sec.gov/news/speeches/spch407.htm.

delivery system, agency markets cannot participate due to dual liability risk. [20] In addition, automatic execution may not be a part of the business model for every market participant. For instance, the NYSE often delays order execution for reasons of "price improvement." Plainly, execution delivery would not accommodate this approach. The order delivery design of the current NMS linkage systems—NASDAQ's SelectNet System for the OTC marketplace and ITS for Exchange-listed securities—is the most robust approach from the perspective of aiding and abetting varied, competing approaches to order handling and execution. [21]

4. The IT Provider would be required to disseminate all information to all market data subscribers at an equivalent speed and cost. Because the Exclusive SIP would be deemed an SRO-operated public utility, it would have to treat all market participants equally. Accordingly, all investors and market professionals would have equivalent access to the utility's information.

5. Although not a prerequisite, the IT Provider should utilize an industry-standard format (e.g., FIX). Non-standard formats are costly for a large number of participants to develop and maintain. A standard format would enable the IT Provider to change without causing all market centers to re-structure their network linkage.

6. The IT Provider should implement an Internet-type, non-centralized network architecture rather than a "hub-and-spoke" scheme, which inevitably leads to single point of failure exposure.

IV. ANALYSIS OF EFFECTS OF PROPOSED IMPROVEMENTS

The Archipelago Proposal would provide for equivalent services that exist in the NMS today. Moreover, the Proposal improves three areas in which the current NMS structures are sorely deficient: facilitation of market center competition; rationalization of market information services; and, improvement of intermarket accessibility.

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[20] See Letter from Gerald Putnam, Chief Executive Office, Archipelago, to Jonathan Katz, Secretary, SEC, dated June 14, 1999 (available at http://www.tradearca.com/news_and_views/viewpoints/viewpoint_061499.pdf) and, Letter from Gerald Putnam, Chief Executive Office, Archipelago, to Jonathan Katz, Secretary, SEC, dated October 25, 2000 (available at http://www.tradearca.com/news_and_views/viewpoints/viewpoin2_102500.pdf) (describing deficiencies associated with an execution-delivery scheme, viz. the creation of a massive single point of failure).

[21] Despite other substantial flaws, execution delivery systems do provide expeditious disposition of trading interest. Specifically, execution delivery enables market participants to obtain immediate notification about whether orders are executed. To this end, the NMS Governing Committee could set standards for response times, perhaps similar to those required of ECNs that participate in the OTC marketplace.

A. Facilitation of Market Center Competition

Under the Proposal, new initiatives by the Governance Committee would not be subject to unanimity provisions, which have been employed in the past to veto innovation both within and without NMS plans. Under the Proposal, no single market participant could prevent other market centers from implementing new business initiatives. [22]

To participate directly in any of today's national market systems, a market center must be an SRO; ATSs and broker-dealers are precluded from directly participating. Under the Archipelago Proposal, non-SRO market centers could directly participate without registration as an SRO. Non-SRO market centers could contract with an existing SRO for regulatory sponsorship. In this way, new, innovative market participants could quickly integrate into the NMS on fair and equitable terms.

B. Rationalization of Market Information Services

An oft-voiced complaint about U.S. markets today is that information revenues are "too high" or "uncompetitive." The problem is that the value of information is not determined by market mechanisms. Indeed, market participants differ substantially on the value of this information. Some participants, such as the Island ECN, Inc., provide it free of charge over the Internet; others, such as the American Stock Exchange, Inc., sell information at the rate of a few dollars a trade—an amount comparable to a commission rate at a deep discount brokerage.

Today, information revenue is essentially subject to a Commission-sponsored rate-setting exercise via the NMS plans, which are infrequently modified. Given that market information is the "lifeblood of our markets," such a model is untenable; we cannot continue to trust such a valuable service to an industry-sponsored utility. [23] Moreover, the current constraints regarding the type of information a Information Collector may collect and distribute serve to limit the quality of information provided to investors. Ironically, in the name of NMS plan rules, a number of attempts have been levied at innovators to limit information display over recent months. [24]

By allowing competing Information Collectors to include additional data and collect and sell data to vendors, the Proposal would replace an infrequent rate-setting exercise with market forces for a valuable service. In this way, the market would reward

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[22] It appears that the Antitrust Division of the Department of Justice could view the extant NMS plans, or activities associated therewith, as serious constraints to intermarket competition. See, e.g., United States v. American Stock Exchange, et. al., No. 1:00CV02174 (D.D.C. filed September 11, 2000), Complaint at 10.

[23] "Quality Information: The Lifeblood of Our Markets," Chairman Arthur Levitt, The Economic Club of New York, October 18, 1999.

[24] At the most recent meeting of the ITS Operating Committee in October, 2000, one ITS participant stated that an exchange that publishes its book outside of the NMS would violate SEC Rule 11Ac1-2, the Vendor Display Rule, and, therefore, violate the NMS Plan.

those that provide value; costly cross-subsidies of inefficient providers would no longer pose an implicit tax to investors.

In addition to rationalizing the pricing of information, the Proposal would further rationalize its provision in terms of technology. For far too long, market participants have labored under inefficient Exclusive SIPs that were capacity strained, or could not complete rudimentary tasks such as decimalization. As with rate-setting, such industry-wide inefficiencies are, in effect, implicit taxes on the level of service provided to investors. It is high time to rationalize information provision so that the NMS aspects of securities trading do not unduly constrain the industry.

C. Improvement of Intermarket Accessibility

Currently, NMS structures that address intermarket accessibility—such as ITS and OTC-UTP—are, by their own admission, based on anachronistic technology. Further, participants regard the regulatory apparatus that police intermarket interactions as less than effective at resolving disputes.

By providing a more active, formal regulatory mandate for NMS plans, the Proposal would assure participants that intermarket interactions would be fair. Furthermore, by contracting with a expert technology provider, and by relying on industry-standard message protocols, the Proposal would vastly simplify, and render cost effective, the means of linkage to an Exclusive SIP. These developments would mark a substantial improvement over today's intermarket accessibility.

V. IMPLEMENTATION OF UPDATED NMS: OTC SECURITIES

As discussed above, NASDAQ evolved as an intermarket linkage system due to the SEC's requirement that the NASD develop an electronic marketplace for broker-dealers trading OTC securities. [25] Until 1988, no Exchange expressed an interest in trading OTC securities, which meant that there was no NMS framework in which non-NASD SROs could participate. In 1988, the NASD and the Chicago Stock Exchange, Inc. ("CHX") negotiated a "temporary" participation plan. In 1990, the temporary plan was replaced by today's OTC-UTP, which has existed since that time on a pilot basis. [26] Under OTC-UTP, NASDAQ was designated as the Exclusive SIP for OTC securities.

Because OTC-UTP does not clearly delineate the intermarket functions served by NASDAQ as Exclusive SIP, and the "intra-market" functions served by NASDAQ as operator of a network that organizes OTC quotations of dealers and ECNs, the plan presents competitive difficulties to would-be SRO entrants. Indeed, rather than use the technology contemplated by OTC-UTP, CHX determined to use the existing NASDAQ

[25] See note 2, supra.

[26] Although OTC-UTP is a pilot program, it has not materially changed since inception.

architecture and participate in NASDAQ in a manner roughly similar to market makers and ECNs. In other words, as a practical matter, OTC-UTP does not provide a feasible linkage system for competing Exchanges; instead, the NASD has co-mingled NASDAQ's delegated function as Exclusive SIP with its SIP-like role for ECNs and OTC dealers.

As a result, when a new OTC-UTP Exchange entrant begins trading today, it must negotiate the terms and conditions of participation with NASDAQ. In the past, this has not presented extreme conflicts of interest because NASDAQ did not operate an execution facility. As NASDAQ moves towards its Super Montage proposal and exchange registration, however, it will increasingly compete with Exchanges and its membership. As such, requiring would-be OTC-UTP entrants to negotiate terms of participation with NASDAQ—a competitor—is unworkable because of clear, substantial conflicts. Nowhere is the potential for abuse so rampant; in what other industry is each new entrant required to agree to participation standards set by its largest competitor?

In addition, OTC-UTP participants are subject to revenue sharing caps. Specifically, a market center cannot earn additional market data revenue once it has exceeded the volume level associated with certain pre-determined revenue sharing caps. Instead, the NASD—an affiliate of NASDAQ, competitor to all participant Exchanges—retains all associated market data revenue above the capped levels. These caps apply for the first 4 ½ years of participation in OTC-UTP.

To remedy these problems, the Archipelago Proposal would eliminate the current barriers to entry and would establish a framework by which one competitor cannot unreasonably limit another's growth. (Figure 2 illustrates the OTC NMS, as reconstituted under the Proposal.)

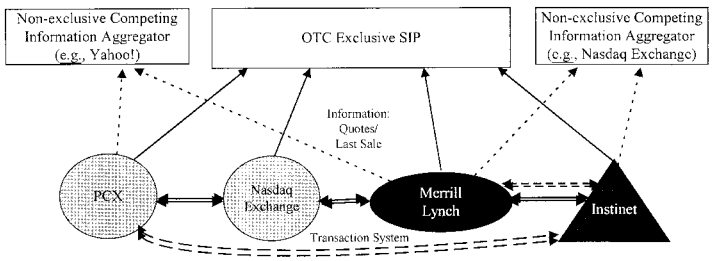

Figure 2: Proposed National Market System, OTC Securities

The Governing Committee would be composed of current OTC-UTP participants.[27] The Governing Committee would solicit bids to replace NASDAQ—a conflicted entity—as the IT Provider. (Although NASDAQ could bid for the role, its role shall not be assumed.) The Governing Committee would appoint an IT Provider based on the relative merits of the proposals it reviews.

All OTC-UTP marketplace rules would be determined by a majority vote of the Governing Committee. For instance, the Governing Committee would need to agree to a revenue sharing plan, the handling of market access fees, and response time standards, if any. Moreover, the Governing Committee would adopt all pertinent SEC rules.

All OTC-UTP participants would submit top of book and last-sale information to the OTC Exclusive SIP. The participants could also submit information to any other venue. For instance, the PCX could submit its OTC top of book and last-sale information to two different venues: the OTC Exclusive SIP and a Information Collector, such as Yahoo!.

In addition, ECNs, other ATSs, and broker-dealers could submit information directly to the OTC Exclusive SIP. In order to do so, however, these participants would have to be sponsored by an OTC-UTP participant SRO, such as the NASD or CHX. This SRO would be responsible for ensuring that the sponsored entity comply with all OTC-UTP marketplace rules.

Under this framework, new market participants could easily enter the NMS for OTC securities. First, market centers would not need to register as an SRO because they could be sponsored by an existing SRO. Second, all market participants would collectively determine participation rules, in contrast to today's conflicted world of bilateral, *ad hoc* negotiations with a near-monopolist competitor. Third, a revenue sharing algorithm would be determined by all market participants rather than by a single participant based on its own business predilections.

Further, because competing market data providers could develop, the OTC Exclusive SIP's market data fees would become competitively determined. Specifically, if data provided by the OTC Exclusive SIP were priced beyond its economic value, competing Information Collectors would step in and provide the data for a lower rate. As more Information Collector entrants participate, reliance on the Exclusive SIP for consolidation services is reduced—and eventually the Exclusive SIP could be discontinued in lieu of a fully-competitive model.

Archipelago has described OTC-UTP as a "case study" because of both the size of the associated conflicts and the alacrity with which NASDAQ is moving to establish

[27] The current OTC-UTP Plan consists of five members: the NASD; CHX; the American Stock Exchange, Inc.; the Cincinnati Stock Exchange, Inc.; and the Pacific Stock Exchange, Inc. In addition, the Boston Stock Exchange, Inc. is a "Limited Participant," meaning Boston must submit information but does have voting authority.

itself as a competitive execution venue via its Super Montage proposal and application to become an Exchange. [28]

VI. CONCLUSION: WE PROPOSE TO MOVE FASTER

Despite profound change in terms of both technology and marketplace innovations, the bedrock principles upon which Congress based the concept of the National Market System a quarter-century ago—information consolidation, access to the best available price, and reliance on competitive forces—are as applicable today as they were then, The structures relating to the implementation of the NMS, however, have not stood the test of time nearly as well. Indeed, today these NMS structures pose barriers to innovation and constrain the cost of securities trading through use of now-ancient technology and a rate-setting apparatus for the sale of market-related information (such as trades and quotes).

The Archipelago Proposal would remove these impediments by injecting a salutary dose of market-based competition into the NMS—by allowing new entrants to build businesses around the collection and sale of market data and around the provision of technology services for the NMS. In so doing, the Proposal would also extirpate the pernicious conflicts of interest that plague NMS plans in which the Exclusive SIP is also a participant.

Only by truly opening the NMS structure to innovators—be they information consolidators, new trading venues, or organizations that recognize the economic value of effective regulation—can we serve investors to the fullest extent possible.

There are many who would wield NMS structures in support of parochial interests, or would slow down the process as a shield from market forces. To those that would proceed in such a fashion, Archipelago "proposes to move faster."

[28] At the risk of implying that the NMS for NYSE-listed securities is in any way a paradigm of co-operation and efficacy, the conflicts inherent with OTC-UTP would be comparable to those for NYSE securities if: (1) the NYSE purchased the remaining 33% interest in the Securities Industry Automation Corporation ("SIAC") Exclusive SIP for NYSE-listed securities; (2) SIAC announced that all Exclusive SIP related technologies would be integrated with those of the NYSE, e.g., SuperDOT would replace ITS; (3) CTA/CQS revised revenue sharing schemes to cap all participants at 2.2%, with the balance accruing to the NYSE's account; and, (4) ITS Operating Committee determined to cancel all regular meetings indefinitely, including those at which regulatory business is conducted.