

COMMODITY FUTURES TRADING COMMISSION

TECHNOLOGY ADVISORY COMMITTEE

Wednesday, May 2, 2001

1:35 p.m.

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Washington, D.C. 20581

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P R O C E E D I N G S

CHAIRMAN ERICKSON: We have a very full agenda today and I'm under orders to keep strict notice of the time so I better take my watch off. Good afternoon and welcome. I'm Tom Erickson, Commissioner at the Commodity Futures Trading Commission. Welcome to the second meeting of the Commission's Technology Advisory Committee.

I'd like each of you to know how much I really appreciate your attendance and participation in today's meeting. I realize that your time is valuable and scarce and that your attendance means that you're spending valuable time away from your business activities.

Each of you, however, can make a real contribution to this committee and I look forward to working with you as the committee's new chairman. As you know, the Technology Advisory Committee grew out of a roundtable that was convened by former Chairman Bill Rainer a year and a half ago.

Many of you gathered for the committee's inaugural meeting six months later where our current Acting Chairman Jim Newsome moderated an excellent discussion on issues related to technology and our industry. Since then much has

happened. The Commission proposed rules for a new regulatory framework, worked through the reauthorization process with Congress, and repropounded rules responding to passage of the Commodity Futures Modernization Act of 2000.

Now that we're back together, we have an opportunity to revisit some issues and, more importantly, to explore what new issues may have arisen in the meantime.

Before we begin, I'd like to thank my staff, Natalie Markman, William Penner, and Delores Vinson, for their efforts in planning this meeting. I'd also like to thank the Commission's Administrative Services and Information Resources Management staffs for their help.

Today's meeting is being broadcast live over the internet and, in addition, I would note that the transcript for the meeting will be available on the Commission's web site.

Please remember our unique microphone system here. Before speaking, you need to turn the microphone on. When speaking, it would be very helpful for the transcriber to identify who you are and remember to turn the mike off after you have finished with your remarks.

At this point, I'd like to introduce my fellow commissioners. Across the table to my left is Commissioner Barbara Holum. Commissioner Holum has been a commissioner at the agency since 1993 and she is the chairman of the Global Markets Advisory Committee. I'd like to invite Commissioner Holum to express a few words of welcome as well.

COMMISSIONER HOLUM: Thank you, Commissioner Erickson. I would just like to join with you in welcoming everyone here today. The attendance of so many important people who are so heavily involved in these issues is a real tribute to Commissioner Erickson and Acting Chairman Newsome for keeping an interesting and lively agenda. It certainly is a recognition by all of us in this room that technology continues to be an important and interesting issue, and I look forward to hearing from all of you and again thank you for coming. Thank you, Commissioner Erickson.

CHAIRMAN ERICKSON: Thank you, Commissioner Holum. And to my right across the table is Commissioner Spears. Commissioner Spears has been a commissioner here at the agency since 1996 and he chairs the Agriculture Advisory Committee. Dave.

COMMISSIONER SPEARS: Thank you, Tom. I also want to add my words of welcome to the members of the committee. I look forward to the discussion today. I want to commend you, Tom, and your staff as well, for what appears to be an excellent agenda. I look forward to the views of all the committee members and the open discussion that takes place. Thank you.

CHAIRMAN ERICKSON: Finally, I'd like to turn the microphone over for a few minutes to the Commission's Acting Chairman, Jim Newsome. As you know, Jim formerly served as this committee's vice chairman and I'd like to thank him for his leadership of this committee and for his gracious offer to turn the gavel over to me.

[Laughter.]

CHAIRMAN ERICKSON: Jim.

ACTING CHAIRMAN NEWSOME: Thank you, Mr. Chairman. Certainly, we have a full agenda today and we came to listen to you speak, not vice versa, so I'll be very, very short. I want to thank Tom for his graciousness in taking the chairmanship of this committee. I think he's done an outstanding job since he's done so. Certainly, I think

we've got a great agenda today and I'm anxious to hear each of your thoughts.

We take the role of the advisory committees extremely seriously at the CFTC. The input that you provide to us on a multitude of issues is extremely important. We know that it's a sacrifice of time and resources on your behalf. We do not take that lightly, and I want to say thank you to each of you for taking time to be here, and Tom, again, you've got a great agenda and I look forward to listening to the discussion today. Thank you.

CHAIRMAN ERICKSON: Thank you, Jim. I'd like to take a few minutes just to talk a little bit about the direction I hope this committee can take. We all know that our industry is in a state of profound transition and, as members of this committee, you see things on the cutting edge of this technology-driven innovation.

That's why I'd like to see you not only lead in the identification and discussion of issues, but also in taking the time to make meaningful recommendations to the Commission and to the industry. I know this is an ambitious undertaking and it will require everyone's full participation, but Acting Chairman Newsome has done a great

job in assembling this group and panel, and I have no doubt that you're up to this challenge.

I've got a couple of exhibits, first of all, and I'm going to share them with you, about what I think this challenge is and why I think this panel is up to really providing assistance to the Commission and to the industry on issues of technology.

I've been on the other side of the table. It's been a few years, hasn't it, Bob? I've participated in advisory committees and I've taken notes on a lot of advisory committee meetings. I go back to the report that was issued in 1987 by the Financial Products Advisory Committee on a topic called "the hedging definition and the use of financial futures and options: problems and recommendations for reform."

That's my first exhibit. The other exhibit here at the table is alive and well; it is George Crapple, who served on the Financial Products Advisory Committee, and contributed to this report.

The reason why I turn to this report is because it had long-standing value for people like me. When I was working for the National Grain Trade Council in the early

1990s, the issue of the hedging definition was very important to resolving a matter that many in this room were part of: resolving the tax treatment of hedging transactions, whether they be on- or off-exchange.

I'm going to pass this report along as something that you can take a look at. I'm hopeful that this committee can settle on a few issues over time and be able to come up with some written recommendations that will withstand the test of time, as this report has done.

Before we start now with the first panel, I would like to go around the room since there are a few new faces and let everyone introduce themselves briefly and then we'll turn to the panel. We'll start with Chris.

MR. CONCANNON: Chris Concannon, VP of Business Development at the Island ECN.

MR. PETERSEN: Bob Petersen, Kansas City Board of Trade.

MR. GARDNER: Doug Gardner with Cantor Fitzgerald.

MR. CRAPPLE: George Crapple with Millburn and Richfield Corporation.

MR. DeWITT: I'm Charlie DeWitt. I'm sitting in for Neal Wolkoff, Executive VP of NYMEX.

MR. ARCHITZEL: Paul Architzel, Division of
Economic Analysis.

MR. LAWTON: John Lawton, Division of Trading and
Markets.

MR. NASTRO: Charlie Nastro, Lehman Brothers.

MR. McBRIDE JOHNSON: Phil Johnson, Skadden Arps.

MR. PAULSON: Brett Paulson, Board of Trade
Clearing Corporation.

COMMISSIONER HOLUM: Commissioner Holum.

MR. CUNNINGHAM: Dan Cunningham from the New York
Office of Allen & Overy.

MR. LEITNER: Tony Leitner from Goldman Sachs.

MR. DURKIN: Bryan Durkin from the Board of Trade.

MR. JOHNSTON: Scott Johnston from the Chicago
Mercantile Exchange.

MS. DOWNS: Yvonne Downs from the National Futures
Association.

COMMISSIONER SPEARS: Commissioner Spears.

MR. FITZSIMMONS: Bob Fitzsimmons from the new
Nasdaq/Liffe Exchange.

MR. BORISH: Peter Borish from Computer Trading
Corp.

MR. MLYNARSKI: Hank Mlynarski from BrokerTec Exchange.

MR. McPARTLAND: I'm John McPartland. I'm an independent [inaudible] for Clearing Systems.

MR. GAMBARO: Pat Gambaro, New York Board of Trade.

MR. ROSEN: Ed Rosen, Cleary Gottlieb.

MR. MOLLNER: Larry Mollner, Mariah Trading.

MS. BARONE: Jodi Barone, Interactive Brokers, substituting for David Battan, who will be here shortly.

MR. FRIESEN: Richard Friesen, founder and chairman of ePit. We build electronic exchanges for capital markets and regulated markets.

MR. HEINZ: Jim Heinz, Marquette Partners.

MR. HORSAGER: Kent Horsager, Minneapolis Grain Exchange.

ACTING CHAIRMAN NEWSOME: Jim Newsome.

CHAIRMAN ERICKSON: Thank you. Let's turn now to our first panel, which includes Paul Architzel, Chief Counsel for the Division of Economic Analysis, who will lead us in a discussion of the CFMA as it relates to technology.

Our second panelist will be John Lawton. He's the Acting Director of the Division of Trading and Markets here at the Commission, and he'll highlight the industry's response to the changing regulatory landscape.

And finally, Phil Johnson, who heads up the exchange-traded derivatives practice at Skadden Arps, will identify some of the potential landmines in this new landscape. Gentlemen, the floor is yours.

MR. ARCHITZEL: Thank you, Commissioner Erickson. I'd like to spend a few minutes highlighting the CFMA and its role with regard to technology. As an overview, government has many roles to play with regard to technology. It can assist in the introduction of new technologies, both through acts of omission and commission. It can take a hands-off approach or it can prescribe development of new technologies.

A hands-off approach may be seen as the government taking the view that it won't control the content of information over the internet, and it had a lot to do with development of the internet through its original application as a Defense Department program.

Finally, the government can create the necessary infrastructure to encourage development by establishing the rules of the road. For example, by establishing the URLs and the way in which addresses will be used for accessing the internet.

The CEA traditionally has viewed innovation favorably and has encouraged innovation and technological change. The CEA from the 1975 amendments mandated that the CFTC encourage computerized trading. It mandated that the Commission have research and information programs on computerized trading and on communications with the idea that such programs would improve regulation. It also, with the 1992 amendments, looked at having and encouraging electronic audit trails and required the Commission to make a study of those.

Now, several years ago, the question arose did the advent of electronic exchanges require a new regulatory framework? The adaptability of a regulatory structure depends upon the role that technology is playing.

Technology that increases efficiency of current models fits into current regulatory structures and raises discrete issues. On the other hand, technology that changes

the fundamental nature of the markets raises more regulatory issues, which may require adjustments to the regulatory scheme.

Technology that increases efficiency by adapting to existing regulations goes back from 1975 right up to the present. These are some of the examples of technological changes that were approved by the Commission under the existing framework. Important developments include Globex, the first such system that we saw operate. John Lawton will be talking more about that next.

On the other hand, technology that modified the basic system that we have in the industry created more challenges to the regulatory structure. An example is FutureCom, which was approved by the Commission on March 13, 2000. FutureCom is a disintermediated exchange. However, because of the regulatory structure of the Act, participants on FutureCom were deemed to be members and thereby fit into the current regulatory structure. But in this event, what occurred was that the business model had to adapt to the regulatory structure, which no longer could adapt to accommodate that change in business model.

Some other ideas that have been talked about that would have created problems for the existing Commodity Exchange Act, in addition to disintermediation include product customization, uncoupling of services (i.e., trade execution and clearing), the change in the business form of the entities that are the exchanges (from mutual associations to proprietary forms of corporate businesses), and finally increasing globalization.

As a response, one of the goals of the Staff Task Force on the New Regulatory Framework was to address directly some of these new technologies and new forms of doing business. This task force report was a predecessor to the CFMA itself.

An identified purpose of the CFMA is to promote innovation for futures and derivatives trading. The CFMA adopts both approaches, both the approach of omission and commission. For example, it provides for discrete technology-defined provisions and basically a hands-off approach with regard to certain instruments.

With regard to the regulatory structure for the futures and options industry, it provides a more technology-

friendly infrastructure using a diffused approach and generally restructuring regulation of the industry.

With regard to OTC derivatives, the statutory exclusions or exemptions generally permit new technologies to develop free of government interference, and they do so through discrete provisions based on specific types of technology.

Now bilateral transactions are excluded if not executed or traded on a trading facility. And bilateral transactions on exempt commodities which are subject to individual negotiation again are excluded from the Act, if not executed or traded on a trading facility.

"Trading facility" itself has within it a discrete definition which is technology bound. A trading facility is a facility on which bids and offers are open to multiple participants. It does not include by definition an electronic trading facility that enables negotiation of bilateral transactions through communication and not from an interaction of multiple bids and multiple offers within a predetermined non-discretionary automated trade-matching algorithm. Those words themselves affect what kind of technology will fit within this exclusion.

There is also an exclusion in the Act for electronic trading facilities. Electronic trading facilities are excluded if trading excluded commodities by eligible contract participants on a principal-to-principal basis. An exempt commercial market is one where eligible commercial entities trade on a principal-to-principal basis on an electronic trading facility.

There are a number of requirements that attach to trading on such a facility. Interestingly, requirement nine provides that the Commission should have electronic access to the transactions on the facility or, as an alternative, such other reports as the Commission requests. It's clear from the legislation that the preferred means of fulfilling this requirement is through electronic access.

An electronic trading facility, one which is eligible for the exclusion, is a trading facility that operates on an electronic or telecommunications network and maintains an automated audit trail of bids, offers and the matching of orders. Again, by definition, the technology will have to follow the definition in order to qualify for the exclusion. The regulatory framework applicable to the futures and option industry encourages technological

innovation both by specific reference within more general requirements and also by encouraging new technologies through provisions and language throughout which tend to be technology neutral.

The overall structure for regulation in the regulated industry is to have tiered regulation based on the nature of the commodity and the trader, with separate regulation and flexibility regarding trade execution, intermediation and clearing, and flexibility through core principles regarding trade, technology, disintermediated markets and business structure.

The regulation of market tiers and separate functions enhances innovation in a number of ways. It provides a wider regulatory template and more precise identification of our regulatory interests so that the regulatory structure can follow changes in the business plan and the introduction of new technologies rather than vice versa.

The greater variety of market structures can be accommodated with regard to ownership structure, trading technology and use of intermediation. This reduces barriers to entry. The Act provides that a DTF, a recognized market,

can list on that facility voluntarily instruments or transactions which otherwise might be excluded or exempt from Commission regulation, thereby offering new entrants to the market the opportunity to obtain recognition from the government, thereby enhancing their credibility.

Core principles better accommodate design variation. They permit greater flexibility in the method of meeting regulatory requirements. Differences are expected rather than seen as obstacles to compliance, providing an opportunity for reciprocal international arrangements for recognition. This has the potential to greatly ease international access for markets, something that is increasingly important in our global economy.

Now, the CFMA did change some of the drafting in the Commission's original rulemaking and, in our implementing regulations, the Commission has proposed to address some of those drafting issues.

In particular, the CFMA provisions did not cover disintermediated markets to the same extent that the Commission's rules, the initial Commission rules, did. The Commission has proposed to interpret the Act to provide, for example, with regard to disintermediated markets, that

disciplinary procedures can be satisfied by denial of access alone. This is different from the way markets that use intermediaries work, and it's an important infrastructure change that needs to be accommodated in order for disintermediated markets to have the ability to be self-regulatory organizations. In addition, the Commission has proposed by rule that, where there is not an intermediary, the market itself takes on the role of the FCM or other intermediary for certain purposes, including service of process to foreign participants, identification of account orders, and for position reporting information.

A second area where the Commission has proposed rules to further the goals of the Act relates to proprietary markets. The Commission has proposed a rule providing that, with regard to proprietary markets, the facility's owners must meet a fitness standard, the same as members currently are required to meet fitness standards for membership associations.

Finally, there are a few outstanding issues which have yet to be addressed. These are important issues which will become increasingly important as we move forward. The first is--and these all relate to or at least both relate to

remote access--the first is when is the trading facility a U.S facility? This becomes an increasingly important issue, particularly as we get to the separation of functions where the trade execution facility may be located in one jurisdiction, the clearing facility may be located in another, and the actual hardware may be located in neither of the above.

The second issue becomes what are the regulatory status and responsibilities of the point of entry into the system? Is the portal acting as an introducing broker to an FCM which has the order execution mechanism? Is it simply a technology provider with the responsibility for customers residing further upstream?

These issues may become increasingly complicated, but they are also issues where we need to set the groundwork so that people know the rules of the road in order to further these business models.

Thank you for your attention.

MR. LAWTON: Thank you. To address my assigned topic, which was Past, Present and Future Exchanges: Regulatory Issues, I thought I'd proceed in a chronological order, touching on some of the exchange electronic trading

systems that the Commission has reviewed in the past, some of the particular issues that were raised by those systems, and then moving on to some of the issues that the Commission is currently facing as well as some that we may be seeing in the near future.

I'll try to give a flavor of some of the kinds of issues that have come up. I won't try to address all the systems that we've reviewed or all the issues that we're confronted with regarding each of those systems.

The first electronic trading system that the Commission reviewed was the CME Globex System. The Commission approved Globex rules back in 1989. In many ways, that Globex review formed a template that was used by the Commission in later proposals and, in fact, in the IOSCO principles that were adopted internationally.

The Commission looked at a whole range of issues, most of which came up, which have come up over and over since that time, such as who can have access to the system, how does the trading algorithm work, how is financial integrity maintained, how is operational reliability assured?

One issue that was very important at that time, but is just of historical interest now was that, when the Globex proposal was put out for public comment, there were some commenters who expressed the view that electronic trading per se was not permitted under the CEA and that essentially open outcry was mandated. In addressing this comment, the Commission actually noted that blackboard trading had been permitted for many years, and essentially took the position that electronic trading, particularly when it used a simple price-time algorithm such as Globex, was basically blackboard trading through a computer with the computer performing the function that the exchange employee had previously performed. Again, as I say, that's simply of historical interest at this point.

Another system that was reviewed after Globex was the Chicago Board of Trade Project A system and another one was NYMEX Access. Those were both in 1992.

One issue that Project A raised was the extent to which an order execution algorithm may vary from a straight price-time priority system. And with that particular system, they had certain priorities that were given and certain order allocation execution rules that were different

from straight price-time priority and the Commission found that those were acceptable under the Act.

A particular issue that came up in connection with the NYMEX Access system was whether certain restrictive covenants that might be entered into between an exchange and its service providers were permissible under Section 15 of the Act, which requires the Commission to take into consideration the antitrust laws. Again, the Commission found that those particular agreements were acceptable.

In 1998, the Commission approved the Cantor Exchange. One unique aspect of that particular proposal was the role of terminal operators who performed certain brokerage activities in the cash market, as well as certain order entry activities in the futures market.

Last year, the Commission approved three electronic exchanges: FutureCom, the Merchants' Exchange of St. Louis, and OnExchange (OnX).

Futurecom, as Paul mentioned, was the first internet-based exchange approved by the Commission. One issue that was raised by that was the security of the system and the equality of response, or the differential of response time potentially, among different participants.

Basically those issues were essentially addressed by disclosure because they couldn't guarantee on an internet exchange that they would have equality of response time.

As Paul mentioned, another novel feature of the FutureCom proposal was the lack of intermediaries. All participants in the FutureCom system would essentially be self-executing and self-clearing. On the trade practice side, this, of course, eliminates many concerns that typically come up with regard, for example, to trading ahead or some sort of unlawful disclosure. There is, of course, still a potential that someone even on a disintermediated system may commit fraud and may engage in manipulation. On the financial integrity side, a self-clearing system raises new issues. Essentially, the way FutureCom addressed those was to install a credit filter on the system which would require that, before an order could be executed, they would check to see whether there was sufficient margin in the account on deposit and, if there weren't, then the order wouldn't be sent to the trade matching engine.

FutureCom was approved by the Commission last March subject to a number of conditions. One was that a third party audit of the system be completed before launch.

This has not actually been done and the system has not yet started trading.

Moving to the Merchants' Exchange of St. Louis, this was approved by the Commission last July. An issue raised in connection with that application, again touched on in Paul's presentation, was that the actual matching computer was located in Toronto. The Commission did receive written representations from the operator that the Commission would have access both to the system and the records generated by the system in the same way that it would have access if the system was located in the United States. So again the Commission did approve that approach.

Another novel aspect of the Merchants' Exchange system was that the exchange contracted with NFA to perform its compliance functions. This is an approach that we expect to see more of in the future. We understand there are a number of exchanges that have had discussions with NFA in that regard. One thing that should be noted is that, when an exchange contracts with a third party to carry out any of its self-regulatory functions, the exchange does continue to remain responsible under the CEA for the proper

execution of those functions. Now, the Merchants' Exchange has commenced trading, but volume has been pretty light.

A third exchange that was approved by the Commission last year was OnX, which was approved last December. It, in fact, was the first exchange approved under the CFMA. Staff had been prepared to recommend approval under the old provisions of the Act and the new CFMA was approved right at the end there, and so the staff actually was able to adjust the recommendations to fit under the CFMA provisions.

Again, OnX would be internet-based. There access would be limited to eligible contract participants, not retail. Again, there would be no intermediation and again, as we mentioned, NFA would perform certain compliance functions. Another aspect of OnX was that was the first clearing corporation that was designed as a designated clearing organization under the CFMA. In this case, there is no, as I mentioned, intermediation. So all participants would be self-clearing. And again, as was proposed with FutureCom, in this case there would be a filter which would require that, before a trade could be executed, there would

be an automatic check to see if there was sufficient margin in the system. Again, OnX has not yet launched trading.

There are two applications for designation as a contract market that are currently pending. One is BrokerTec and one is one HedgeStreet.

BrokerTec, as you know, is owned by a number of major brokers and broker dealers. I'm sorry--banks and broker dealers. And as you know, BrokerTec already operates a cash market trading system. As with some of the others, BrokerTec intends to contract with NFA to perform some of its SRO functions (self-regulatory organization functions). Commission staff has been working with them and is fairly close to completing its review of that proposal.

The other pending application at this time is from an operation known as HedgeStreet. This would be an internet exchange. They are proposing some unique contracts based on contingent events. I won't go into the details of the contracts. They're very interesting, and they're different from anything we've seen. One thing that I will say about them is that they would require full payment. There is no leverage involved in these contracts. One issue that is of interest to this group that has arisen in

connection with this application, and which we may see as a recurring issue, is that, although HedgeStreet has very well thought-out rules and procedures, it does not have a functional trading platform at this time. And the issue is basically that the Commission in the past, going back through the previous exchanges that I have mentioned, has not required that exchanges have a fully operational system before they're approved.

Going all the way back to Globex and going through most of the other ones that I've mentioned, the launch date generally was fairly well after the approval date, which allowed the systems to engage in appropriate testing before they actually went live. It remains an open issue as to how far in the development process one must be before the Commission can actually approve the system, and HedgeStreet is an example of where we're grappling with trying to decide where the line should be drawn. For example, one could probably say that, at a minimum, there would have to be some detailed design specifications as to how the system would work.

Looking forward, the staff has had discussions with a number of entities that are contemplating doing

electronic trading. As Paul mentioned, the CFMA certainly provides a much more extensive menu of choices than was previously available for what regulatory box you want to be in.

It is interesting we have not had any DTEF or EBOT notices as yet. Most of the entities that we have had discussions with seem to be leaning at this time toward the contract market category, although, of course, a lot of people haven't shown their hand yet, but they have indicated that may be where they are leaning. It seems to be that the ability to open a market to all kinds of participants and all kinds of products seems, at least in some people's minds, to outweigh the lighter regulatory touch that is available under some of the other proposed regulatory boxes that you can go in.

In conclusion, I would say, though, that there is a lot of interest out there, and you can't predict at all where people are going to end up.

MR. McBRIDE JOHNSON: Mr. Chairman, I have been asked to identify some glitches in the system as a result of the new statute. It's not easy to find them. I think that the Commission and Congress have done a terrific job of

creating flexibility in the process and, the way the technology is changing these days, it was not a moment too soon.

The first observation I have is really nothing more than a glitch. The fraud rule as it now applies to futures trading--it's not true of options, but it's true of futures--only prohibits an intermediary from defrauding the customer, one of his clients, if these markets become disintermediated so that there is no middleman. There is always the possibility that one end-user will figure out a way to stick it to another end-user, and there is nothing in the federal statute at the moment that the Commission administers to deal with that particular set of facts.

Now, maybe there doesn't need to be. How many dozens of fraud laws are there all over the country already that could be used--these are consumers, remember--that could be used for the purpose, but it is a gap in the regulatory fabric for this particular agency. It will be up to the Commission to decide whether there are plenty of remedies on the books already or whether something should be done in that regard.

Far more interesting from my perspective is how the technology changes the capacity of these new institutions to engage in what I grew up to understand to be self-regulation. And to explain the situation, I need to point out two things. It is not really changes in technology that create the problem I'm going to describe. It is that the changes in technology get people thinking about restructuring the nature of their markets. And it is the restructuring of those markets that creates the issue that I want to discuss.

Let's go back to the traditional exchange. What was it? It was created by market participants, owned and controlled by market participants. They set the rules, they picked the contracts, they decided who was coming in and who was going out the door, they had full control over just about everything, but they also had two other things that were critically important.

One, they had equity in the institution. And for some of them, it was the most valuable asset their family possessed. For others, if they were good, they could derive income from their participation on the market that might even be in excess of the value of their membership on an

annualized basis. So it was their career as well. Those are powerful incentives to behave or, if you don't, to take your lumps.

The second model would be the electronic trading platform, publicly held, run by a management team that probably doesn't trade and never has had an interest in trading, but requires intermediation. This means that the exchange will not accept an order directly from any customer. It must come through someone, and who is that someone? It's somebody that the exchange itself has had to vet. They look at the balance sheet. They look at the history of disciplinary actions. They go through the same process virtually that one would do with a member in the old classic exchange environment. And often they're called members. An example of this model would be the OM Group exchanges in Stockholm and London. The most important thing to remember here is that, while they have no equity and there is no seat that is up for grabs if anything goes wrong, they are the gateway to that market. They have a franchise that is extremely valuable and, for that reason, we can expect them to behave or, failing that, to take their lumps.

Now, let's go to the third model, which is the second model with one difference: Intermediation is not required. Maybe it's not allowed, but at least it's not required. Now, we have public shareholders electing a board of directors, choosing management, none of them in the trading community at all, making all the critical decisions internally as to what's going to trade, what kind of business standards are going to be applied. And the market participant is out there somewhere in the desert on the other end of something called a subscription agreement or a licensing agreement or a user agreement, and has no contact or association with the institution other than the fact that, like you and me, we're customers of the telephone company.

In that environment, the only thing they have at stake economically is their trading privileges, which may or may not be valuable. In all likelihood, this is not their full-time career, could be, but not necessarily. So there I am on the management team and I find a problem in the system and I find who did it. I write him a letter and I call him, tell him that I am summoning him before the exchange for the purpose of showing cause why he should not be put under

certain restrictions on his trading activity, why he should not be fined up to \$100,000, and why he should not be censored by the institution and blackballed forevermore. And he receives this letter and he says thank you very much for your letter of such and such a date, saying what I just said. End of paragraph. New paragraph. Please be advised I quit.

Now what can the exchange do in that situation? It can become a collection agency. Won't the shareholders and the venture capitalists be happy about that. It can either go out and become a litigating goon, chasing after every one of these subscribers who misbehaves and then doesn't do what you've said to do in terms of punishment, or you're going to let them go--and, in all likelihood, you're going to let them go because, look at the cost-benefits of the alternative, it doesn't seem to make much sense.

So there is a lot of credit to be given to the fact that the Commission and the staff have now said that, if you have an environment like that, then terminating access to the system is a sufficient response to a disciplinary violation.

There's a little bit of a problem in the system for this reason. It says that, if the party being disciplined is not a member, then you can throw them off the system and that's sufficient. Unfortunately, while that accommodation was being made, someone else was rewriting the definition of a member in the statute. And now it says it's not only someone affiliated with the exchange through ownership or whatever, but it's anyone who has a right to trade on the facility. So in a circular sort of way we're back to the point where every one of these subscribers in Aurora and in Moscow, every one of them has now become a member again because he has trading privileges. So that's a glitch. Something should be done about that.

Another area that is related to this where I think the same accommodation is needed is that, if one flips from the disciplinary proceedings side where this accommodation has been made back to the investigative level, the expectation of the Commission from its pronouncements is that one will have the ability to collect all the information, review all the data, and get whatever testimony and input you need to conduct the investigation.

Now, there are two reasons for that. One, it's to verify that there is, in fact, somebody policing what's going on out there, but the other is that this is a very good sort of audit trail or record that the exchange is not in some way or another treating the subscriber unfairly, railroading him out of town, coming up with trumped up charges, et cetera. It's the evidence that the exchange acted reasonably.

Because of the fact that the current requirement is that you have the ability to get all of this done, let's go back to my letter. Dear Mr. So and So: We have been authorized to conduct an investigation into your affairs and we ask that you provide us with your books and records with respect to activity on this exchange going back to such and such a date. We also invite you and request that you come in for an interview so that we can look further into this matter.

Dear Mr. Johnson: Thank you very much for your letter. Please be advised that I quit. So the very same problem exists in the preliminary phases of the disciplinary process that would occur at the very end of it. In fact, it's unlikely that anyone would make the investment in

cooperating in an investigation that had no intention of taking the consequences on the head.

So in these models it is just as a practical matter impossible to replicate the self-regulatory programs as I grew up to know them. In the case of FutureCom, I often make the comment that one of the requirements is it must have disciplinary committees, and the owner is a man named William O'Brien, and all I said to someone--I think it might have been to Paul or someone--is I sure hope that Bill has a big family because you can't even populate the infrastructure for this sort of thing. You can't have a disciplinary committee.

The shareholders aren't going to do it. Colin Powell is a shareholder in my company. He's not going to come in to sit on the business conduct committee, right? And I'm not going to expect my management to do it either. So it's a very ill fit. In a sense, it's the only real--what I'll call huge--policy adjustment I think that the Commission needs to make in this new environment which, as I say, is driven not so much by the technology as by the impact that technology has on the restructuring of the business.

And those are my comments. Thanks.

CHAIRMAN ERICKSON: Thank you very much. We've got a few minutes if anybody would like to question the panelists on either what the law means or what landmines there may be out there. Any questions?

MR. LEITNER: I've got a question for Phil.

CHAIRMAN ERICKSON: Please, Tony.

MR. LEITNER: Phil, if I understood your thesis, you have a concern that there is a regulatory gap--is that a fair statement--in regard to the disintermediated exchanges? Disintermediated markets? In terms of something the Commission should actually do to fill that?

MR. McBRIDE JOHNSON: No, I'm suggesting--I would suggest if anyone were asking me for solutions rather than problems--I would have suggested that this Commission itself should step in to the extent investigations are required. To the extent that enforcement proceedings are necessary, I would suggest that the Commission use its own existing authority.

MR. LEITNER: Some of these models and what the technology can do prompts me to at least share the thought-- and I'd certainly love to hear from the new exchanges out

there whether they agree or disagree--that because of the ability of the technology itself to set the terms of trade, it may be less possible to game the system than an open environment where the rules are not set.

In other words, in addition to having filters that are credit filters, it is possible to have, depending on exactly how you set up the terms on which people participate, you can make it much more difficult for problems to occur. So I guess one question is whether or not the self-interest of the parties investing in creating these vehicles isn't itself a sufficient incentive to protect against--through the technology itself and the very system that they're creating--to protect against the possibility for misuse of the system by trading participants.

MS. DOWNS: I'd also pose another question. I actually think it creates the scenario, if you look at eBay out there where they actually didn't do anything and allowed everybody access, and they have now gone the other way and set up a self-disciplinary process for good business reasons, so that as people want to use the system, they have a way to prevent people from participating as well as

potentially collecting money from them under those scenarios because they are harming other users of the market.

So as much as you think disintermediation can send yourself away from self-regulation, I actually think it's gone the other way in the actual marketplace out there.

CHAIRMAN ERICKSON: John.

MR. McPARTLAND: I have a technology point, not a regulatory point. I was surprised at Paul's last slide in that I can remember when the Commission used the venue of the investor to determine whether the Commission would apply its regulations, and the last slide he's got is when the trading facility is in the U.S. It's possible to have a trading facility in the U.S. and all the investors in Canada, and whether the Commission would elect to apply its regulations to the trading facility because the trade-matching engine is in the United States is something that one could argue with.

The real point that I want to make is that there is technology out there now--XOBJEX, Jini, SOAP Technology--that if you think of clearing as 128 sequential processes, it allows those processes to take place on the internet. Process number 117 could take place in Karachi, and to

knowingly place yourself in a position where the application of regulation turns on the venue of where the process takes place is not a position where I would knowingly place myself.

When this committee gets together five years from now, we'll be talking about things like this and finding that there is a large process that takes place in six different countries. I would say go slowly in giving yourself--I wouldn't use that criterion as the criterion to determine the application of regulation because the passage of time is going to make it increasingly difficult to determine where the processes actually take place.

CHAIRMAN ERICKSON: Well, thank you very much. Yes, Larry. No, Ed.

MR. ROSEN: I thought that Phil's remarks were intriguing. I am just wondering whether the question of whether the equity in the seat versus the potential loss of privilege of trading is the greater sanction in terms of inducing good behavior, if you like, and compliance on an ongoing basis with an exchange's rules. I'm just wondering whether there is any lesson in the behavior of lessees or licensees versus seat owners in that context because they

don't have the same equity at stake as the owner of the seat.

I just point out one thing. In the--I think this is public--context of the BrokerTec application, we were also somewhat concerned about that issue, and the way that we determined to address it was to require that members having trading privileges on the exchange post a bond which could be used to satisfy the disciplinary sanction. I think it might very well depend upon the nature and the importance of the market as to whether the access, the privilege of access, is enough really to induce ongoing good behavior.

CHAIRMAN ERICKSON: Scott.

MR. JOHNSTON: Scott Johnston talking. I'd also ask Phil along those same lines whether this strong linkage between an exchange mechanism and a clearinghouse mechanism, if those two are bound tightly together, whether that has any credit relationship to FCMs in order to get a customer to comply. If I have a credit relationship with the FCM who in turn has a credit relationship with that customer, does that provide any more rule enforcement power?

MR. McBRIDE JOHNSON: I think most of the credit support in that context is for trade losses rather than for

disciplinary outcomes. I'm not aware of any clearing houses that stand behind their members quite that thoroughly. So I'm not sure that I could find a connection.

Ed is absolutely right. Again, let's talk about career risk. Basically that's what I'm thinking of--in terms of you've got the seat out there and it may be rising or falling in value. Unfortunately, some are falling in value these days, but that doesn't mean you can't still make a very, very attractive living on the floor or maybe on the screen, but I would expect that in the environment of a disintermediated electronic market with not 500 major customers but maybe ten or 20 million people trading because it's so much easier now to do and the access is so much more liberalized, that there will be many, many people on the system in the future that have not been traditional participants who will be on there as much for the recreational value of it as anything else and might just want to take a punt at something for the pleasure of annoying someone like the hackers do. So I think the risk may be up a little bit.

CHAIRMAN ERICKSON: Okay. Why don't we conclude that discussion for the moment, at least maybe until the

wrap-up discussion on priorities. And thank you all for your presentations. I appreciate it very much.

Let's turn now to a discussion of--I guess this is a follow-up discussion on order routing. Our next speaker this afternoon is Yvonne Downs, who is the senior vice president for compliance at the National Futures Association. She will be briefing us on the guidance that NFA is developing with regard to supervision of the use of automated order routing systems.

This topic has gotten a lot of airtime. At the last meeting, it took up a fair amount of time. And I for one am encouraged to see some movement on this issue and look forward to the presentation and the discussion. Welcome, Yvonne.

MS. DOWNS: Thank you. We have been looking at a topic that I know that came up several years ago, and I know the CFTC put out proposed rules at one time on automated order routing systems and then withdrew those rules. I think it's interesting that we're back here talking once again.

With the advent of technology, we have taken a hard look with a whole variety of people in the industry,

both the exchange representatives and many of our FCM representatives. We've even brought in what we call ISVs, or independent service vendors, that supplement the industry in many of their activities, to try and come up with best guidance, if you will, on how to handle automated order routing systems.

And again, trying to keep with the theme that we need a lot of flexibility out there for all the different forms of technology, but at the same time trying to provide some form of standards for the types of things that are necessary to promote business but also ensure that customers get treated fairly in these systems.

We've kind of come up with a direct guidance which we brought today. It's not complete, however. It will be completed within the next couple of weeks. So we apologize for giving you a draft. We have one area that we're just refining one more time.

The supervision goes into a couple of different areas. It covers the area of security and tries to lay out that we need to address that issue if you're using automated order routing systems. It tries to stay away from the type of medium that's being used in technology. But again, going

back to the business issues associated with using automated order routing systems, and addressing things such as passwords or other types--I use passwords because it's such a well-known term--but if you look at the guidance, we also talk about other types of certification of that security. We talk about firewalls and talk about just how you verify who are the users of your system, who's actually accessing that system, and what you're doing to address many of those issues if it becomes inactive, those kinds of things.

So we suggest the industry take a hard look at some of these issues. We think it affects everyone, and we know that we want to provide some flexibility, but we'd love any input anybody's got since we believe very much that automation is going to continue down this path, and it's really going to be a question of how close to the engine do you let your customers get. And what are the roles they're all going to play?

We also tried to deal with the issue of capacity, both from a processing perspective of what disclosures are necessary, as well as performance on the systems and how you test performance. I know that, in the equities world, there was a firm that was having a lot of difficulty with order

routing and got fined recently and that should promote everybody to take another hard look at capacity and how you're servicing customers.

We also look at the issue of redundancy and just how much redundancy is necessary. I've heard the arguments both ways. Let the customers decide how much redundancy they want and need based on costs; and then I've heard the other side, how do you ensure that your system is up and operating on a consistent basis. So we've tried to address somewhat the issue of redundancy.

And then I think probably the touchiest area in all of this was trading controls, and this is just what do you do when a customer places an order. Depending on how sophisticated that customer is, do you need something that verifies what he's doing before he enters it? I know on this agenda we have some things dealing with errors and "fat fingers" and I think everybody has now seen technology in action--and it has its pros and its cons. I think the pros are it does provide speed of access. I think the cons are, believe it or not, there get to be more errors and, I think, costlier errors.

So we talked a little bit about trading controls and focused on the issue of the sophistication of the customer. Obviously, the more sophisticated the customer, the more it's necessary for you to have a hands-off approach because they need speed and they are going to be going across many markets. With the less sophisticated and certainly the retail business--which is one of the things I think everybody that I've talked to at many of these new exchanges--although they like the different categories that are provided under the new CFMA, everybody is setting themselves up so they can do retail business just in case. So that being the case, filters become very critical in that process, and we are recommending, if you're dealing with a retail base and they aren't sophisticated, that there be filters on the front end before those orders actually go into engines.

So that's the nature of the different guidance and it is just, again, meant to be best practices, but it is meant to try and begin the concept of standardization. And I'd like to put that out for this audience. We did not deal with standardization but, as we add technology to reduce the cost to allow for all these interactions of all the

different types of technology that people want to interact with, I think it begs the question of standardization.

I know that becomes a have and have-not situation. If you think you've set the standard, then you're in the have category and you like the standards that are being proposed. If your systems aren't meeting those standards, you're in the have-not category and then what do you do?

My proposal is that we really as an industry address the question of standardization. We want to reduce the barriers to entry so that we can do all these new products. Everybody wants to trade. In my opinion, we have to get to standardization to get there.

I asked the question of where the equities markets fit into that question. I have heard for years of the FIX standard that's out there as a protocol and, as much as everybody says that's a great standard, I've actually heard that there are six or eight versions of that standard. To me, six or eight versions of something is not a standard. So I'd ask this audience where you're going on the question of standardization, and I hope that we can come up with some solutions so that everybody gets to grow this business in the manner that everybody would like.

CHAIRMAN ERICKSON: Thank you very much, Yvonne, for teeing the issue up again, and I am sure there will be no shortage of discussion. I'd open the floor to anyone with specific questions. Bryan.

MR. DURKIN: Yvonne, I appreciate what you've put forth to the group and am very interested to hear what the NFA's thoughts are with regards to security and access. I think we all know that this is a major issue for many of our firms today in terms of how do we promote the business and how do we not put too many handcuffs around access and speed in the ability to execute trades, yet we've all fallen prey to problems in terms of just how wide open you allow that to be.

When you talk about automated order routing systems, what is the NFA's feeling with regard to using a group user ID to be able to come into a trading engine?

MS. DOWNS: I think that's a very interesting issue, and I think it depends on how far away from the engine you allow access and who gets direct access and whether it's intermediated or not.

Interestingly, in all our discussions in laying out guidance for automated order routing systems, even the

most sophisticated users if they have direct access to your engine--people felt there needs to be real-time monitoring of that activity, whether or not you actually have filters, because there are times where people, even sophisticated people, should have direct access but sometimes they make mistakes. So how do you address just the ability to have access and provide for that speed and sophistication, and at the same time make sure that you don't unintentionally execute orders that cause potential price manipulation or certainly lack of transparency in systems, is an issue we all wrestle with on an everyday basis.

So I think we're just suggesting that everybody focus on it and come up with some procedures, and I think we do need some standards.

MR. MOLLNER: Yvonne, when you were doing your work on capacity, did you look into connectivity and any kind of standard screen or window or real-time mechanism for letting the client know that he was actually connected and/or that his order went through?

MS. DOWNS: Yes, we did look at many of those different issues, and one of the reasons it's not here is because there's a lot of disclosure that people want to use

as opposed to setting a minimum. I think we will definitely in our next guidance talk about disclosures. I'm not sure we will set a minimum.

And I think that this industry needs to look at the question of whether there need to be some minimums. I think the equities industry is a little farther ahead on that, and they have begun to set a minimum standard out there. I think that we're all embracing new technology, but I think we need to really focus on what's happening in other industries.

CHAIRMAN ERICKSON: Charlie.

MR. NASTRO: I intend to comment a little bit on what Yvonne said in my presentation, but there is a real issue out here and it's being touched upon as the AORs, but pretty much all the ones that we've dealt with have limits. What don't have limits are the exchange engines and so the members who are out there who are trading directly on systems, whether it be Eurex, a/c/e, the Chicago Merc, there are no limits. There is no risk management.

And that's an exposure that is systemic to the systems that are currently in place. But when I speak, maybe I'll mention some other issues around that.

MS. DOWNS: Can I just add one point to that? I agree with you that some of the engines don't have it but, even the ones that do, people aren't using them to their fullest.

MR. NASTRO: Right, right.

MS. DOWNS: And I think that's another piece that's necessary.

MR. LEITNER: Tom.

CHAIRMAN ERICKSON: Tony Leitner and then Phil Johnson.

MR. LEITNER: A couple quick points. First of all, Yvonne, thank you for taking the initiative to do something like this. I think it's a brave endeavor, but the fact of the matter is that these order routing systems are-- in many cases are--in fact, giving Sunday drivers a Ferrari, and that does raise really a number of issues that can happen.

It strikes me that--and since I'm here as sort of the securities guy more than the futures guy, at least I think for purposes of why I'm here--I would point out that the options exchanges, which connect to the--which have a capacity to take electronically entered orders--do have what

they advertise to the public as an automated order execution system. Some of us have observed that it doesn't always act that way, but it is certainly advertised as having those qualities.

And they do have limits. RAES at the CBOE has a limit on the size of orders that can be placed in the system. One of the outcomes of that, however, is that, as firms/intermediaries do provide electronic order entry systems to customers, the customers often are quite sophisticated. The technology they have to determine when and how to trade is very sophisticated and very timely, and there is a tension that develops between, at least in those markets, the floor markets and the order entry trader.

The problem for the order entry firm is that it puts the order entry firm in the line of fire from a regulatory perspective because, if the rules of the exchange are violated as a result of the manner in which the ultimate customer is entering the order and that's not somehow blocked or stopped in the system, then that can lead to sanctions imposed or disciplinary proceedings brought against the intermediary.

In that context, I think what's important is, as we look forward to the trading of stock, single stock futures and the like--products that can and will trade potentially on either securities or futures markets--the need for standardization or the need for a potentially consistent approach not only to the standards that may be applicable to order entry systems, but also to the receiving exchanges' regulations. Let me just give you a specific example: Most of the options exchanges have now adopted a rule that says that an order--there must be 15 seconds between the entry of two orders on the same side of the market for either the same series or class of options, and that's to prevent what they call unbundling which is taking--you know, you want to buy 100 contracts, but you enter ten contracts as fast as you can press the button and so, in sort of outlawing that practice, the exchanges have adopted a rule that requires at least 15 seconds between the entry of each order. And while that's good because, from an order entry firm's point of view, you can actually program your system to prevent a customer from putting you in jeopardy by entering an order within 15 seconds on the same side of the market. If one market says, well, but the 15 seconds

restarts if we move the market because that's a new trading position by definition, but another market doesn't have that rule, then you get inconsistencies across markets in what is essentially a fungible product because, unlike the futures exchanges, options are options--an IBM option is an IBM option--because it's issued by the OCC.

So among the things to sort of be concerned about--and I have no view frankly as to the extent to which the SEC or the CFTC should themselves think about intervention here--however, there is one area where, of course, it is relevant and that is, to the extent that regulators get to approve exchange rules, a careful attention to the detail of discrepancies across markets or among different markets trading fungible products will become an ever-greater challenge, particularly if those rules become immediately effective upon filing which is what, of course, all the exchanges want in order to be competitive.

So we have a number of issues as intermediaries that we are looking at but, in any case, I think that the NASD is thinking about doing something like this. So I'm glad you've taken the initiative. I don't know how we feel

about it yet, but at least it's out there and we'll certainly comment.

CHAIRMAN ERICKSON: Phil, did you have one final comment on this?

MR. McBRIDE JOHNSON: A very quick one. John McPartland mentioned that it could be a bit risky to associate where you have a place of business with where your technology might happen to be. This comes up in the order routing context, too, particularly with foreign exchanges.

I've taken a number of exchanges through the process of getting trading terminals authorized to be placed in the United States and there is always the open question, well, that's well and good, but when they start handing out order routing systems or allowing their customers to get order routing systems into the terminals, is that covered by the no-action letter? Does that mean that they are now establishing a place of business in the U.S. and ought to be licensed like every other American exchange? So there are a lot of implications to those.

CHAIRMAN ERICKSON: Okay. We can pick up a little bit more in the wrap-up session on this topic as well. Thanks very much, Yvonne. We'll turn to one more topic

before we take a break, and this topic is something that's generated, I think, a fair amount of interest at a couple of presentations anyway.

It's been highly recommended to me by staff at the Commission who have heard this discussion, and we've invited Charlie Nastro from Lehman Brothers to come down and share his insight on straight-through processing. And I'm looking forward to hearing from him directly. Thank you.

MR. NASTRO: Normally when you come down to the Commission, you come with your counsel. I've come with my officer, my technology officer, Dino Scouras, to protect me against any comments I make improperly since my background was a lawyer.

CHAIRMAN ERICKSON: Dino, you can join him at the table if you'd like.

MR. NASTRO: No, he's okay there.

[Laughter.]

MR. NASTRO: The farther away I stay from Dino everyday the better. I spend literally an hour or two with Dino and his staff on a daily basis. What I want to try to do is just talk about the practicalities and get down to running the business. God bless us with our legal

backgrounds and discussions about disintermediation, but what I want to get down to is the nuts and bolts of futures. I'm not going to talk about other derivatives.

We had a couple of panels that evolved out of a call that I received from the Operations Division of the FIA, which had to do with STP, straight-through processing. And we put together a couple of panels down in Boca. We also put a panel together at the New York OpTech and Brett was on that panel. Just to give you a little history, it's working because today we had 17 people on a call this morning on the suggestion that we made of getting people together and trying to take small steps, not giant steps.

Giant steps are for mega companies, and we're just trying to get going. We at Lehman are very focused on straight-through processing. Why? Because I am one of 15 or 14 businesses in fixed income, and I am the only business that cannot hit a home run everyday. Mortgages can hit a home run; FX can do very, very well. I can only get a single, but I need to get a single everyday. I need to make money everyday. Every other business that we have at Lehman can afford to lose on a given day. I can't afford to lose.

And you can make money, but if you don't bring it down to the bottom line, you're not in business. I've been running the business at Lehman for about ten years now, and I need to always concentrate on what makes the bottom line. I can worry about volume. I can worry about all the ways of getting clients. But at the end of the day how do I make money?

I make money by watching every dollar that goes through the firm. And I make money by looking at manual intervention that goes on ad nauseam at firms, and it's been better. Sure, it's been better. Brett and the CME have been wonderful at getting things done, but there is so much on the plate to happen, and it just is taking a long, long time.

Straight-through processing is really the backbone of our business. It's the operations, the everyday sort of, you know, the usual stuff that we've talked about. I'll also say something about give-ups, and so I'm going to be didactic for a second. What I'm going to do is give you a definition. Brett has heard it. Brett can probably memorize this and recite it because I recite it at every meeting that we have.

And why do I recite it? Because it embraces every conceivable touching of the order by the business and the exchanges. And where did the definition come from? About a year ago at my firm, I hosted a group of about 25 of us from the firm and said the basic question is for the next two days we figure out how to do it better.

How can we do it better? Even if it's a minor improvement, at the end of the day it's going to reduce our overall costs. So bear with me. Listen to the definition. I won't ask Brett to recite it, but he knows it.

Straight-through processing is a total vertical integration of the trading process from order entry, execution, settlement, clearing, and reporting. The movement of data within a process without manual intervention, the validation of data on an exception processing benchmark. It's the final disposition of an asset, exercise, assignment, deliveries, custodial, depositories, accounts, right to the ultimate recipient.

It can be delivered by me. It has to be delivered by the futures exchanges, the clearing houses, the FCMS, the regulators, custodians, depositories, settlement banks and

software vendors. And there are many of them who now are participating in AORs, what have you.

It's different things to different people, depending on your constituency. But at the end of the day, there are two basic concepts: open outcry and, you know, the knight in shining armor--electronic futures trading, which is not so shining sometimes. And I'm going to go into that.

Just to give you another sense of things, from my standpoint at Lehman Brothers, we have an electronic platform. It's called Lehman Futures Live. It has access to seven exchanges right now. It has access to all the Tokyo exchanges, Europe, and the United States. It is for the most part straight through, but we'll talk about the problems with it going forward.

Open outcry: Let's take the customers first and the brokerage firm. For the most part, we are STP. If we deal with our clients, whether we're Goldman or Lehman or Merrill Lynch, we have developed a straight-through process whereby clients see everything on a real-time basis.

We're there. Why? Because the customer demands that we be there. Otherwise we're not in the business. The

problem is not so much the customer having real-time and straight-through process. It's us getting the information from the sources that we have to getting it to and feeding the customer. We can do smoke and mirrors, and the customer will think we are wonderful, and we're STP to him, but we're not STP to the universe of doing business.

Let me give you an example. Take a look at the Chicago Board of Trade and the Chicago Mercantile Exchange today. If you try to gather whether it is a process--right now there may be a thousand, and Bryan and Brett can correct me if I'm wrong, I may be slightly wrong--there are a thousand to 1,500 keypunch operators in the FCM community, and what are they doing? They're keypunching.

Now, you think of businesses in the world today, and any industry that has keypunch operators still in operation. Now they've been doing a good job, the Chicago Merc and the Board of Trade with CUBS and with TOPS and those functions, but you have to do more because that's an incredible cost.

For me to do a trade electronically and to do it open outcry is five times more expensive and that's only talking about the exchange costs to me. It's not my back

office costs to myself, which I have to handle in a more intelligent way. So it's a very serious issue.

And why is it serious? Because I told you I'm a singles business so I need to make money. And the way I make money is by charging commissions. Now if you've looked at--if any of you have wanted to know what my commissions were five years ago versus what they are today, they're probably a third of what they were or half of what they were.

What about exchange fees? Where do you think exchange fees are? Do you think exchange fees have gone down 50 percent? You know, the Chicago Merc has done a little bit on volume, which is good, but they have so far to go. And at the end of the day, this business on open outcry is semi-STP. It will never be STP in its full sense, and it will be the most expensive place for me to do business. So for straight-through processing, we, the Board of Trade and the Merc have done okay in trying to help you.

The BOTCC has done a great job in providing more functionality, but it's a bottom-line problem. It's a problem where we'll never really succeed without paying too much attention to open outcry. I think, at the end of the

day, there are still changes going on there, but let's talk about electronic trading.

Okay. This is excellent. I mean right now thousands of contracts are traded everyday at my firm and at other firms. And why is it excellent? Because the client for the first time sees market depth. In the past, he'd call up the floor; there's 800 people on the floor, and he's getting the greatest perception of the market in his little corner, but there are 790 other people giving different markets potentially. Here he sees depth of market right across the board. So it's going to become more and more a level playing field. He's able to click on the transaction.

AORs provide trade limits. You know it's funny that you mention trade limits today because Dino and I were outside having lunch and we got a phone call because one of our house traders was frozen. He wasn't allowed to trade. He had hit his limit so we gave him relief by notifying our administrative officer to increase the individual's limits.

So they do work. At least today. I don't know about tomorrow. But with electronic trading, there are still numerous issues: There are allocations, the bane of all of us. Average price scenarios. Some exchanges have

them; some don't. Network lapses. Connectivity was mentioned. There are failures all the time with connectivity. There are nightmares of contingency, nightmares of us being able to have a system in place that effectively allows us, if we fail, to go to the exchange.

We can go to the Board of Trade, and there is a managed system to look at all of our business and to be able to manage our orders, which is the most important thing to do--not necessarily fix the machine, just get the order done. But there are exchanges, which will remain unnamed, that don't have that. So what do you do? You pick up the phone and you call some help desk to get them to help you.

Is that straight-through process? Is that the ability to make it work? There are so many issues around this. It's a tough situation. So when I say that I have spent an hour, an hour and a half a day, that's normal. It's normal because we are committed to electronic trading, and the issues that come up every single day are totally different. The surprises that we've had in dealing with AORs or a/c/e or Globex or CME or Eurex or Liffe or Tokyo have been awesome because they've been different all the time and it's almost a new territory.

Now, for your purposes and for Phil Johnson's purposes, the Commodity Futures Modernization Act is the lawyer's relief act of this millennium. I mean you had one 20 years ago. But for the technology groups in this world, this is a bonanza. Okay. Because there is so much going on in technology, you really need to have full-time staffing. Why? Because every single exchange is different. You have to twist and turn and come up with a novel solution.

Now someone mentioned the FIX protocol. Yvonne says there are six or seven, nine differences. You need a standard. Exchanges need a standard--a standard protocol. FIX is just a word. FIX is what the securities side did because they had a major client say I'm not going to deal with any of you unless you have a protocol.

Now, hazard the concept--and some of you could even give me a better handle on this--what if all the electronic exchanges today had a standard protocol? What if all the counterparties had a standard protocol? What do you think my technology bill would be? Charlie Nastro, the singles business. Okay. Probably would be half. Probably a third less. You know, I'm just guessing.

It's obvious to me. We have a totally dedicated support team in the United States of maybe five or six fellows who totally are only focused on futures technology right now. And we have the same number of people in our London office supporting our business, which is really, you know, the beginning of a new business.

I think it's important for us to begin to look at these issues. I have to applaud the FIA board, of which I happen to be a member, and Marianne Burns because they formed a working group. And that group is advising the FIA board. Members of the FCMS are on that. I think the CBOT is on it. The Chicago Merc is on it. And what they're doing is they're working on a fixed protocol.

So it's not all forlorn. I'm not totally pessimistic. I think you can achieve protocol, but you have to get rid of the turf battles. You have to pay attention to working together, the politics, even the concept of not-for-profit--it doesn't matter whether you're not-for-profit. You still have the same motives; you really want to try to keep things to yourself.

Here the only way we're going to succeed as an industry is to not keep things to ourselves. It is to

develop a standard and come up with a protocol that we all can feed into. We can have our own front ends. I can have a better front end than Goldman, Goldman can have a better front end than I have, but if we have the same standard, we're going to cut down dramatically on our cost and we'll be able to create the kind of front ends that our clients want.

What can we do about it? A couple of things. I wanted to mention also that I keep talking about "us" here around this table. This is global. If you don't get Eurex involved, or Liffe, or Singapore and the Tokyo exchanges, you're fighting half the battle, because right now a majority of the electronic trading is not done in the United States. We know that. It's all done in Europe. My market, my number one market, is Eurex and will continue to be Eurex for I think a significant period of time.

So any strategy you have around a standard protocol is going to--should include global. So Marianne, you should get Eurex and all the others, and get them caught up in this because they really need to be part of it. They're facing the same problem across the board.

A couple of things. I think a forum like this, whether it's CFTC sponsored or industry sponsored, is very important because we need to begin to talk more out loud about some of these points.

I think, as I said, you need to take simple steps initially: Regulation 1.25. For a firm like Lehman, we have pretty significant cash management, but you probably helped continue the diversity of our business. Why? Because you're helping the small firm cash manage, and so they don't have--they have less paperwork and any less paperwork you can have, the better. Otherwise, you're going to have six firms running the business, and I don't think I--I can speak from Lehman's perspective--and others don't really want that. The more diversity, the more liquidity, the more that come to the market, the better.

One aspect that I think Brett undertook--if he didn't, he's going to undertake it hopefully today--is collateral management, developing a standard around the world of collateral management so what's good for the Merc is good for the Board of Trade across the board. And I think that will again help in a little way to make life

easier for my treasury and might make life easier for the accountants.

And not to leave the CFTC out, there's something called Interpretation 9. I came here five years ago--I think it was a Global Markets Advisory Committee presentation, and I suggested--some people were horrified--that you should abolish Interp. 9. And why do I say that? At one point Interp. 9 was necessary because you had all the investment companies who were not permitted to deposit their funds with the FCMs. So what did they do?

They set up all these third party custodial accounts in which they believed they had a bankruptcy advantage, which we know they don't have, and then the SEC after a lot of pushing and shoving agreed that the investment companies did not have to hold their funds with the depositories. They could put it directly with the FCMs. But Interp. 9 remained there as sort of a beacon, and so what's happened is pension plans today and investment companies still put their funds with depositories.

Why am I saying that this is not good? It probably costs us--not me--lots of other firms, millions of dollars in funding because what do I have to do? I have to

take my money and I have to deliver it to BOTCC. And that's a good safe location, but at the end of the day I have to deliver my funds to BOTCC. So that's a financing cost I have. Okay. And now Goldman, Merrill, we all have the same thing. Well, I don't even want to talk about Europe because Europe is even worse than the United States. Eurex is probably the worst in its segregation because there you can't even put customer funds up. You can only put your funds, your securities up.

So I think it would go a long way if we examined that provision and said, hey, do we really want it? What does it do? What is its purpose because right now every investment company could, if they wanted to, every pension plan, could put their monies with the institution, the FCM. And Interp. 9, even though it's no longer applicable, still sits out there as sort of a beacon for the investment company lawyer and the pension plan saying, well, we want-- is it okay if we do, you know, put the funds with the depository? I'm not going to say no. Merrill is not going to say no. None of us are going to say no. Why? Because if I say no, Goldman is going to say yes. So it's a competitive issue. So we need to put that aside.

Another one for my friend Brett and for these exchanges--I'm glad you're here, Brett--is cross margins. Okay. It's woeful how we look at cross margin. It's political and we get some of it done and we do these little bits and pieces. But if you look at firms like Lehman and major firms, what's it all about? It's about risk management.

That's what it's about. A customer comes in and says I have a dollar, I want to spend that dollar, and I want to use that dollar, and in the most leveraged way prudently. Okay. So we have to use that dollar and we have to margin this, this and this, and what does he want? He wants a VAR. He wants a value at risk. He wants to give you a dollar and buy stuff, and he wants to know what's my risk. Okay. So the same thing, not necessarily the same VAR concept, should hold true for the client and the exchange where that security is.

But for the exchange uniqueness of having ten exchanges, all these futures contracts could be traded on one exchange. You can have one clearinghouse, one cross margin across all markets. I keep looking at you, Brett, but anyway--

Mandatory give-up, automated processing across all exchanges--this is a really a European problem. Okay. There is a U.S. problem which I'll get into in a second but, in Europe, there's no gain system, and I applaud again the Chicago Merc and the Chicago Board of Trade because they have a system which effectively allows you to bill the member for execution of a transaction.

And as you develop electronic exchanges, you're going to have more bifurcation of clearing and execution. You're going to have someone sitting at a screen, and he's going to be able to execute and can give it to Phil, Brett, anyone he wants to. Well, there's a collection process there. Right now on the Chicago Board of Trade, it's automated, except for one glitch that I'm going to mention.

In Europe, it doesn't exist. So what do we do? We spend an inordinate amount of time with people clicking away, sending out billings and payments, receivables and payables. And at one of these meetings--I think it was down in Boca--I made the statement that I bet you that every single FCM in the audience--and there were about 20 of them--has a serious receivable and/or payable problem in Europe, and all I saw were heads nodding yes. Why? Because

naturally bills don't get paid, and then what's the exposure? Not only do I not get money but, if you invested in the euro when it came out at a \$1.15, you are now 25 cents less and 20 percent of your give-up fee is gone by the wayside.

So it really is a tangible bit of money, and I'm going to close with the comment about gains in the United States. Today's meeting of the 17 are dedicated to gains. And what they're dedicated to is trying to figure out a way to do away with third-party exceptions. What the Chicago Merc and Chicago Board of Trade have done, and it's a wonderful system, is they effectively debit and credit members. So if I do a trade, execute on the floor, and I give up to Merrill Lynch, I get paid through the Board of Trade and/or the Merc, but I have the ability to prevent that by saying that I don't want the member to be paid, I want a third party to be paid. And so there's probably, I would say, if gains were 80 percent to 85 percent viable, there's a 15 percent problem but, with that 15 percent problem, that causes me to have more work in that process.

Again, just by looking at bits and pieces, if we can just take small steps, we can save ourselves some time.

I can save myself cost and I can continue to remain, even though I'm a singles business, I will continue to remain as a business.

So I thank the Commission for the opportunity to make this presentation and, if there are any questions, I'd be more than delighted to have Dino answer them.

[Laughter.]

CHAIRMAN ERICKSON: Dino. Are there any questions at this point? We do have a few minutes if anybody would like to follow up? Yes, Chris.

MR. CONCANNON: I do have a quick comment on the standard protocol. We accept at Island FIX 3.9 to 4.2 and, within each version, there are probably several versions where each user actually changes or modifies certain fields. But it is important that you have a standard protocol across the industry.

There also is something else that you can do, and it's something that we did at Island, and that was create competition among protocols where we took a FIX standard. We said what is the information that has to be in the protocol, and we made a FIX-lite and we made it our proprietary protocol. So a developer like Dino would look

at our protocol and say, you know, Charlie, I'll connect to Island quicker than I'll connect to the exchange because it's easy.

And we created competition among protocols. It's all under the standard FIX protocol. We're all sending necessary messages, but it's actually encouraged even Nasdaq to rethink its protocol. So I encourage a standard across the industry, but you do want to have some flexibility within the protocol for people to create some competition.

CHAIRMAN ERICKSON: Okay. Well, if there are no further questions, thank you, again, Charlie. I appreciate it very much.

We've covered an awful lot of ground here, and we've been sitting for awhile. Why don't we take about ten or 15 minutes? I believe we've got some refreshments out in the anteroom, and we'll look forward to seeing you back here at about 3:20, 3:25. Thanks.

[Recess.]

CHAIRMAN ERICKSON: Let's settle in here and see if we can't make it for the last stretch.

Thank you all again and I thank the panelists from the first half of this meeting. I think it was an excellent

discussion and at risk of teeing up yet a few more issues, which we've asked some of our committee members to do, we'll give everybody a little bit more to chew on.

What we've tried to do with the next panel is to provide a forum for discussing some of the more pressing concerns facing the industry today and, as I've mentioned, three of the committee members have graciously agreed to take these issues on and raise them for additional discussion by this committee.

Scott Johnston, Managing Director and CIO of the CME, will begin this panel by exploring how best to ensure that technology delivers what it promises.

Bryan Durkin, Senior Vice President and Administrator of the CBOT's Office of Investigations and Audits and Order Routing, will follow up by discussing error trades and whether policies encouraging standardization are necessary to handle these types of trades.

And finally, Tony Leitner, Managing Director and Goldman Sachs General Counsel for Equities, will pose some tough questions on what to do when everything goes wrong.

As we go through this, we can have a little bit of discussion as we go along but, if we could let each of the

panelists get through their presentations, it might facilitate the discussion. I think we're using technology again here with PowerPoint. Thanks.

MR. JOHNSTON: Thanks a lot, Tom. The context for my presentation is I had a meeting with Tom about three months ago where, having just come from the OTC side of the fence, I remarked to Tom that I was pretty surprised at the level of audit scrutiny on the CFTC side versus the OTC side where I had been for 11 years at SBC and UBS. You can imagine, during the euro, the Year 2000, and the integration of SBC and UBS, we were under very heavy audit scrutiny.

So when I think about regulatory oversight, there are a few things that, as a manager at the CME but a participant in CFTC markets in general, you think audits might be able to for you. One is you could use audit scrutiny to raise the standards of competitors. If somebody is maybe less good than you are in a particular area, you could cost them time, money or management attention to address audit concerns.

Another thing you might do--I don't think we do at the CME, but you might have internal initiatives to bolster reporting or bolster audit requirements where it's necessary

for you to get an outside push on management in general to get things done.

The last thing you could do is have a view that some form of audit scrutiny protects the industry in the aggregate, which is what I'm here to talk about today. And my proposal for the group is that there is a level of oversight which protects our industry, both customers, the sell side, the buy side, and balances the concepts of scope and materiality when you think about where to focus audit scrutiny.

And again, having lived on the bank and OTC side, I've seen quite a bit of scrutiny at different levels. What I would suggest is that the kind of scope and materiality that we should worry about is system-wide risk, as opposed to worrying about the credit risk of a single firm failure--looking at things like very large financial risks that cover many counterparties or potentially cause you serious reputational risk for the market in general, potentially cause you system-wide legal risk, or create an event that could close a market.

Audits today generally focus on the top four bullets here: You look at general controls, you look at

governance and how decisions are made and implemented, you look at business practices, and you look at market and credit risk. One thing that's up and coming is having a view towards auditing for operational risk, and I've read some of the BIS proposals recently where they're really focusing on operational risk at this point. In case people don't understand what it is, the BIS defines operational risk as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems, or from external events. And it looks very likely that an operational risk charge is going to be included in the new BIS II capital practices.

A little bit more context on operational risk at the CME: We think that operational risk is a component of exchange valuation, and the way we look at this and the way that we think about exchange valuation in general, we use something called the Gordon Growth Model, which says that, and this is a very simplified model, but it's the thing that all staff at the CME know and understand and they know how their job fits into some of these different categories that are inputs to the Gordon Growth Model. The market value of an exchange, let's say, is equal to the equity free cash

flow generated by the exchange divided by the cost of equity minus the growth rate of your equity free cash flow.

And different parts of the exchange certainly focus on different pieces of this equation. There are certain people who are responsible for growing and building new businesses and, of course, they are worried about the growth segment of that equation. There are also people who are responsible for risk management and credit risk management, but also operational risk management. And that's where we understand, if we're operational risk managers, how important it is to reduce operational risk with respect to our market cap.

When I talked to Tom, the scope of my talk was supposed to be talking about capacity, functionality and security. So what I tried to do here--and I've talked to our clearinghouse, I've talked to people in the audit function of the CME, I've talked to a lot of different people. We tried to categorize the kinds of risks that we think about when we think about operational risk, and the topic of the conversation fit pretty well here where you think about whether a risk emanates from inside the exchange, like its people working at the exchange (CME

employees), or from outside, whether they be customers or, in the worst case, people that are not authorized, like a hacker.

So that's going from right to left in this diagram. Then top to bottom is whether you're authorized to be doing something on the exchange, whether you're unauthorized, or whether you're internal, and we categorize the risk this way. It's kind of a non-scientific way to look at it, but it works pretty well. So functionality, capacity and security definitely fit this model, and one other thing I threw in for a little bit of discussion was methodology, which has a lot to do with the internal process by which you develop systems and manage future operational risk.

I assumed, by the way, that a lot of the people around this table would be bored by going through lists of specific audit points so what I tried to do was pull out some things that were pretty interesting, that were more industry specific, but some of them are broad in nature. So here we go.

Methodology. Again, that's how you develop systems, whether you have a systems development life cycle

that's a well-defined process by which you specify a system, you build it, you test it, you roll it out, you maintain it, and you retire it.

Third-party vendor risk management. This is something where we, certainly at the CME, rely a lot on small- to medium-sized vendors as well as big vendors. We believe that you need to manage your vendor risk, especially with respect to financial viability. If any of you have bought products or services from dot-coms in the last couple of years, I would suggest that you should probably look at how viable those companies are right now. What's the plan should any of those go under?

Similarly, antiquated technology risk management. Again at the CME--in previous roles, I've sat on a lot of very old technology where you had to worry both about the hardware that the thing ran on, and also what software was running, but even more importantly what skills you could access in the market to actually affect changes to the system and also, if you had the skills in-house, how fresh was the expertise? Certainly a lot of problems we've had revolve around old technology and not having fresh expertise and experience in changing it.

Last on methodology is change control. A lot of people have change control, but you have to look at the systems you use, the scope of change control. Do you have change control for every system, do you have change control for, for instance, scripts that people use to configure systems, and also the governance around change control? Can anybody effect a change or are there certain people that, given the right sign-off, can affect a change?

Functionality. At the Merc we're firm believers in systemic risk protection. We've just implemented a couple of concepts in our engine. One is price banding. Another is maximum order size. We just put those into production. We think that that's the first step towards a little bit of the risk management that Yvonne discussed.

Also, audit trail functionality. We firmly believe that you need to have it, and that you have to have it locked down. Also, you have to have adequate credit controls handed off to FCMS so FCMS have all the information and control they need to manage their credit risk of people trading on your system.

Capacity. This has been a big issue for the Merc because we've been growing our electronic business. This

year it looks like it's about 140 percent annualized right now, and that number has a lot of gamma in it so we expect it to go up even further. But we have an internal rule which is you have to have capacity for two times your last known peak.

But again, there is no industry standard for that. And that's important because you have to look at what would happen to your system should you overload it? Does it fail? Does it just slow down? What really happens to the system, therefore the market, and that is something that we think is important to look at.

Along the same lines as business continuity, should a system fail, what are your recovery procedures? How do you maintain the market? We firmly believe at the Merc that you need to maintain the market, and that's a very high priority for us.

Related to this also is stress testing. Again, it's high volume, but it's also high transaction rates, it's response time measures during high transaction rate periods. It's complete stress testing of the environment right out to the user.

Security. Good to hear people talk about the need for network security standards, firewall standards. Also, John McPartland mentioned something that I'm very familiar with, having worked at two Swiss banks, which is data security and data protection standards. Those are definitely not harmonized across different regimes. That's something that you really need to be careful of--if you have one piece of your operations sitting in a country where, for instance Switzerland, there are very strict data protection standards.

Also user authentication. We call this passwords, but there is another level of authentication: non-repudiation, which guarantees that the person at the other end of a transaction is that person, not a person who could have known the password of somebody else. Those two things together guarantee that you really know your customer.

Lastly, thoughts on implementation. How would you do this? Well, you can split this into two pieces. One is what are industry-specific practices relative to either a financial market or, even more in particular, a CFTC-regulated market. We think we need to be a little bit more broad.

And those things are things that we need to invent, but also a lot of what an audit or technology audit or operational risk audit needs to cover really can be found out in the industry and a lot of other places. There are a lot of best practices that can be taken from other industries. I suggest we take those.

As far as how to implement it right here in our industry, we could go two ways, both of which have a defining regulatory guidelines thread. One way is you could define regulatory guidelines and then have an independent audit where each exchange, each firm, would be responsible for proving that they met those guidelines. A second way would be to actually have the audit function within the regulatory function. The requirement for that is you have to have specialized staff that know both the technology side, the operational side, and the business side. And my experience is more with the Fed. They definitely had that and they were very good at it, but it was very difficult to keep that function up for them.

And the last point I would make at the end of this presentation is that we really need a level playing field with respect to any regulatory requirements we have

regarding operational risk. And that is really that foreign exchanges should be subject to the same requirements as their U.S. counterparts. The end.

MR. LEITNER: Can I ask him a question?

CHAIRMAN ERICKSON: Certainly, Tony.

MR. LEITNER: Because I think I'm violating your own rules of conduct, which is save it for the end, but I might not remember at the end.

CHAIRMAN ERICKSON: I think it's fair in the context of this discussion if we have a few minutes of questions after each presentation. Then we can have some general questions and comments following. Thanks.

MR. LEITNER: Thank you. Thanks. In your last slide, you use the phrase "certified via independent audit." Independent--how would it be independent? Like an accounting firm type audit?

MR. JOHNSTON: Right. There are accounting firms that do, for instance, enterprise-wide risk management services where operational risk is one thing they'll look at.

MR. LEITNER: Okay. Well, let me just say that we've had some experience, at least in one context, because

in the securities industry, the only area--unlike the banking industry which may be different, but I only know what we do--where there is something similar to that is in the rules regarding something called BD Lite, which is the OTC derivatives firm, and in those rules there is a requirement that the accounting firm essentially certify annually to a number of things.

And what we found out, sort of after the rules were developed--and we had a lot of input in developing the rules--was that there wasn't an accounting firm around that would actually produce the opinion that was being requested of them. They said there was no way from an accounting point of view or an audit point of view to actually test the things that they were asked to test.

So we sort of made our own deal about what they would say about it and hopefully that will work, but I just wouldn't take for granted that, when it comes to actually certifying to a regulator as opposed to telling you what they think, that the accounting firms are willing to go on the hook with very much.

MR. JOHNSTON: That's a good point.

CHAIRMAN ERICKSON: Any other general questions for Scott at this point?

MR. HEINZ: In light of the last slide and the level playing field, I just wanted to get Scott's opinion on--because you are talking about a level playing field-- isn't it true that the member terminals down on the floor of the CME enjoy a connectivity over those that are outside?

MR. JOHNSTON: Hi, Jim. Yes, that is true right now because of the architecture that we have for electronic trading and order routing systems at the CME.

MR. HEINZ: So how long do you expect that to last, Scott?

MR. JOHNSTON: We don't have a good answer right now because there are a couple of other issues wrapped up in that question. For instance, should we allow other ISVs access to the floor and, if the answer to that is at all yes, how can we control that environment, the floor and the ISV network on the floor? We have to answer those two questions before we can come up with an implementation plan to give you that answer.

MR. HEINZ: So just so I've got this right, all of us that were on CME terminals that are reaching out for that

same bid and offer, if we go at the same time, what you're telling me is the people on the floor with terminals will get it ahead of me on the outside. Is that correct?

MR. JOHNSTON: That is correct.

MR. HEINZ: Okay.

MR. JOHNSTON: And there are two reasons for it. One is the CME runs the network that those terminals sit on. The other reason is the infrastructure that the original GL terminals were built upon is part of the electronic trading system where we have to work that and the ISV out of that equation.

MR. HEINZ: Okay. Just in the spirit of the level playing field.

MR. JOHNSTON: Sure. I expected that question from you.

CHAIRMAN ERICKSON: All right. Bryan, you're next.

MR. DURKIN: Thanks. Thank you for this opportunity to talk a little bit about an issue that's near and dear to my heart. For those of you that might want to follow along, I'm not going to use the slide show, but I do

have a packet in here that serves as the outline of my discussion with you today.

That issue is error trade policies and electronic trading platform medium and should we have them? Shouldn't we have them? Why? Why not? I hope that this provides some thought provoking discussion within this group. I know it will with the gentleman to my left in terms of discussions that we've had on the issue of error trade policies and to what extent should exchanges be in the middle of those situations?

I thought to give you a little background in terms of where we are at the Chicago Board of Trade, I'd go through briefly the error trade policy that I'm challenged with. Again this is something that's near and dear to my heart because I'm on 24 hour call, and I'm the guy that they talk to whenever there happens to be a problem in making the decision in terms of what the status of that trade is going to be.

It can be a rather ominous task. And I don't think it's something that we can take lightly at all. As far as the Board of Trade is concerned, we want to be responsive and we want to be able to learn of the situation

with great immediacy and make a determination with great immediacy.

I think when you look at our policy, you'll say, well, it doesn't seem like great immediacy when you say that the trade has to be called into question within ten minutes of occurrence and then you, as the officer in charge, have another ten minutes to make the determination in terms of whether or not the trades are going to stand or the trades are going to be busted.

There is a big philosophical debate going on right now regarding whether we should even be in that position of deciding whether a trade should or should not stand. But hopefully giving you a little background as to my experiences in the last several months, you might understand where the Board of Trade is coming from, at least now, because I do believe that even though we're growing and our system is very vibrant and we're very pleased with the volume that we've been experiencing over this system, I think we're still infants in this area in terms of our understanding of the exposures that are out there and what we can do to be a bit more proactive as an industry to address them.

Looking at the error trade policy that exists today, one might say, first of all, the policy is too long, in terms of when you may call something into question. I would argue that point because we have situations out there where people don't even realize that they've conducted a trade on the system. We've been stung by that a few times in terms of, you know, individuals that have placed a coffee cup on the machine or individuals that thought that they were putting in a priced order, ended up putting it in the wrong field, and put it in the quantity field and before they knew it. When they were thinking they were doing a one lot in bonds, they ended up doing 5,000 contracts in that particular commodity future, and they call us up and say, you know, there's something wrong with your system.

The system is going crazy, spitting out all of these orders. It's telling us that we're buying hundreds and hundreds of contracts, and we never even touched the thing. There is something very wrong with that system. We have to respond and try to react as promptly as possible to ascertain what the situation is.

That's one example that can happen here. Another example is a trade price that has gone in "fat finger"--

somebody has made a mistake in terms of putting the put price in the call price field or the call price in the put price field. Or they thought that they were in the five year notes, but actually they were in the 30 year bonds, weren't terribly conscious as to what their actions were, and caused quite a movement in the market in terms of price volatility.

We're then brought into the middle of those situations and have to arbitrate essentially on the spot and make a determination as to whether the trade should or should not remain valid, and there is a number of issues that we have to take into consideration in making those decisions. Just to give you a sense of the stress that's involved in making a determination like that, add the complication of having side-by-side markets where you've got the contract trading both on the electronic medium and in the open outcry venue. I'm glad to say that I think we're doing a pretty good job producing rather tight markets in both complexes.

Just to give you a little example of what recently happened in our venue, somebody literally had everything that they could have displayed on their screen in terms of

news information and different trading platforms. They thought that they were going into a particular news item. It turns out that they had the trading screen active in our system, and ended up being the proud owner of several thousand contracts.

That trade resulted in a series of trades. And that trade resulted in substantial volatility in the marketplace in terms of what we saw was basically a dead day--movements of about a two-three tic range and that it turned into well over a point. And we weren't seeing that kind of volatility at all in the open outcry market. We had several hundred transactions that were impacted by this particular situation, and phones were ringing off the hook. You heard some reference today about talking to a help desk and that can be challenging in and of itself, particularly when yours is located in Frankfurt and they're talking to you about all of these trades that are flying through and now you have to adjudicate on the spot what's going to happen.

In this particular situation, we made a decision and we stood by it, and I think responsiveness is key. You have to make a decision. It's tough and you have to stand

by that decision, and then you can debate after the fact whether or not the decision was right. But people have risks and people have to know to manage that risk, and be able to move on.

So that begs the question: should we even be involved in that mix? There's a lot of controversy on this subject right now in terms of the exchanges have no place in determining what is a valid price and what is a valid trade? That is the decision of the FCM that agrees to do business on that system, and they should have the risk protocols in place to protect themselves and to manage their business.

Generally speaking, I agree with that philosophy. Nothing would please me more than not to have my exchange in a difficult situation of making those kinds of determinations. What might seem a lifetime to me is split second decision-making that's going to impact a lot of people.

Then there is the opposing view in terms of, well, we have to have something in place at least today to deal with these situations. And we have to have something in place, particularly to deal with potentially catastrophic

events, because we all know, if we really want to be honest with ourselves, that these mistakes could bring down a firm.

We have to be very conscious of that in terms of the risk mechanisms that are in place, or we expect to be in place, to deal with these situations. I'm very heartened to hear today around this table the suggestion and the emphasis on technology that's out there today that can deal with these situations. I think that's terrific. I agree that the technology, to some extent, is there. What I don't agree with is that people are mindful and understand just how much this impacts them and just how much they need to be focused on this issue. And they don't necessarily become mindful until it hits them and it hits them in the pocketbook.

At that point in time, responsiveness happens. And I think that we can do something within this group to help this along and be a bit more proactive in seeing what we can do to help standardize the situation.

Now, the FIA has done a great job in trying to coordinate some of this, and I happen to sit on the FIA Executive Committee of Law and Compliance, headed by Ron Filler. I'm going to give him a plug in terms of

coordinating the efforts of a survey that was conducted. It really involved globally all exchanges that are out there because my assignment at the Board of Trade right now is look at this error trade policy, dissect it, do whatever you have to do to make it most efficient for our marketplace, because what we have in place today obviously needs to be fine-tuned.

We're going to do that. And we're going to do that within the next month. We're going to have something that will come forward that we hope is a bit more palatable to our constituency. However, it's far beyond the Board of Trade, and I agree with what we're trying to do in the context of the FIA to come to some standardization in this regard.

I think the fundamental question that we had to ask, and we asked it as part of a panel that we did in Boca, we had 22 representatives and I know people walked into that room, and thought, well, this is crazy, look at all these people around this table; who's going to be interested in hearing 22 people hear themselves talk?

It actually turned out to be a very productive discussion, I thought, and we really tried to hone in on a

few issues. Those few issues were error trade policies, risk management, and standardization in terms of what's out there with the technology. One unanimous theme that came across--and these were from domestic and global exchanges--was whether we like it or not right now. Unanimously the opinion was there has to be some kind of a mechanism in place to deal with errors and to be able to be responsive to errors, because the marketplace just is not there yet today as we speak if we were to turn off any error trade policy across the exchange industry.

So what we're committing to is to go a little bit further with that and see what we can do to look towards unification in that respect. I look to this group today to help give us some guidance in that respect.

CHAIRMAN ERICKSON: Thank you, Bryan. Are there any questions that folks would like to ask Bryan specifically at this point? Charlie?

MR. NASTRO: I couldn't let it go by. This is a very difficult issue, and I think it's difficult because of side-by-side and open outcry going on at the same time. There are people on the floor who could be seriously disadvantaged because of positions they currently have on

their books, and with something going beyond them, not knowing what's happening.

It's very difficult issue. I've been actually wavering back and forth. I'm of the opinion that there should be no policy. At the end of the day, we all have to take our risk. One of the difficulties, and I've said it before, is that a lot of these exchanges don't have any risk management, and, you know, sent to Eurex, there is no risk management. So if you are using the screen, and Eurex allows every FCM to have a screen, every person to have a screen, that person could lose millions of dollars, they could make a mistake because of the fat finger mentality.

If you have an AOR, like a brokerage firm, the limits are in place, and that account can't go above those limits. It might not make a mistake in prices, but it can't go above the limits. So you created the problem yourself by virtue of having a no risk manager.

I'm not saying it's you. You appreciate, Bryan, where you and I have had conversations on this point specifically. It's a very tough issue, but at the end of the day, it's almost, maybe it's better to put buyer beware because what Bryan does and it's okay--they have a process--

and that process is five minutes, ten minutes, you know, whatever it is, that's five minutes. Why should it be five minutes? Maybe it should be three minutes. And what happened during that three minutes.

Everyone out there is trading left and right. So it's enormous the unraveling of the process. I appreciate the problem right now, but I think we got to sort it out. I think, number one, you should have risk management because then you can cut the problem down significantly. And the question again is a side-by-side issue, and maybe you can narrow it down to protect the interests that are out there that you believe you have to protect.

But that's where I--I lean both ways, but I think right now, at the end of the day, we've got to protect ourselves, brokers, from the fat finger, and we have to be smart. Maybe not every Tom, Dick and Harry should have a screen directly out of the exchange.

MR. LEITNER: Can I express an opposing, or at least a different, viewpoint? Not an opposing viewpoint, because I agree with almost everything that Charlie said, particularly with regard to the risk management aspects that have to be in place at every level.

But I think there is a distinct difference between the size error and the price error, and that with your proposition, that most credit filters will help you with the size error. I think one problem with, you know, the development of this technology is that there are a lot of smart people working on this stuff, but nobody can think of everything as they make systems more usable. After all, you're always responding to what the customer wants to do-- the ability to enter multiple orders, scaled orders, all kinds of stuff, depending on what market you're talking about. Lots of securities and futures markets might be different in this regard, what kind of environment you're entering the order into, how fast it can react if you're going into an ECN, it may be different than if you're going into somewhere else.

But one of the problems--take the Nasdaq market as an example. The Nasdaq market, you know, is now so fragmented that the ability of any one area to control and to have a policy becomes very tricky.

In the futures market, you have CBT. They have a policy. If it's advertised and people know it, you may agree or disagree with it, but those are the rules of the

game, and a regulator has signed off on it. So what may be happening, however, with regard to the variety of exchanges with all the different levels of regulation, is that you may have variations in policy with regard to what product. It actually has this cross--this impact in the price setting mechanism in other markets.

So again we move into single stock futures. To the extent that somebody makes a mistake and puts in a price that's, you know, ridiculous, way off the marketplace, but it's an executable price and it goes into a market where people now do execute and because these damn things are so fast, within seconds, there are actually transactions taking place that are priced. And then you go to, you know, whatever it is dot-com and find out what the guys are saying about it in the chat rooms, and nobody can figure it out and rumors are abounding, and what are you going to do.

I mean, the fact of the matter is it's a false price. It's not the market price. That's not an interaction of people who are really buying and selling at anything kind of like the level. So my problem is that unless you can do something about that and do it in an across the board way, yes, there's the moral hazard by being

able to do something about it. That's my next topic, which is why I'm saying this because it segues right into what if everything goes wrong. Everything goes wrong. So I think the issue of what the ideal should be, and maybe I would agree with you that ideal is you take your lumps, and you bear your consequences. Therefore, knowing that you'll bear those consequences, you'll do everything you possibly can to make sure that nothing bad happens is not really the true reality, because you can get a situation, and you cannot prevent a situation where the price discovery mechanism itself is thrown out of whack, and people are, you know, winning and losing in that environment, that's somehow bad. I think that you got to be able to do something about that.

MR. NASTRO: Let me just raise one point. Yes and no. Here's the issue. Okay. At the end of the day, the problem of market price is a problem of a fat finger. If I have 500 lots, I'm not going to affect the market unless it's mortgage futures. I'm not going to affect the market. But if I do 5,000 lots, I'm going to affect the market.

So it's really the price limitation that causes the market disruption. The volume is what hits it. The problems that we've had in MATIF, in Eurex and Board of

Trade have been about contract size. At the end of the day, if there were fat fingers available there, you would have had a minimum of a loss. You have a loss that you could negotiate between two parties rather than the awesome kinds of losses that occur and why do you have? This is no risk management. If there were risk management at Eurex, ACE, or the Chicago Merc, everywhere, with the engines, then you wouldn't have the problem.

With all the AORs out there where you can name all the vendors, they all have some sort of a fat finger limitation. So I can control my customers, but if my brokers or my proprietary people wanted direct access to the engine, I can't control them. Why? Because the exchanges don't have risk management. Why don't they have risk management? Because speed, speed, speed. They're selling speed. They're selling ability to get to the host, to the engine, and that's a problem. And, you know, it's not a level playing field theoretically because those members are going to have more access. You're going to be at risk, I'm going to be at risk because of an error policy in place, but all the customers and clients have to go through an AOR.

MR. LEITNER: Just to make sure we all, hopefully, at least agree on what the issue is at the end of the day, the issue when you're in this meeting is, ultimately, whether there is a policy judgment to be made by a regulator in terms of how it is going to look at exchange rules that are error policies. Again asking ourselves what do you do in the cross-market situation where you may be having multiple regulators, exchanges, securities, SROs, the SEC, all dealing with that. One would hope at least in that type of linked market situation that there would be some consistency and the ability to act either in concert or not act in concert, just to complicate life.

CHAIRMAN ERICKSON: All right. Excuse me.

We have one question. Patrick.

MR. GAMBARO: Yes, the problem doesn't just lie at the exchange. The problem is at the FCM as well, who allows the customer to go directly to the exchange. If you disallowed that to happen and had your own risk management systems in place, which a lot of the FCMs and the CTAs and those types don't, it will help us trying to regulate your problem.

The other problem that happens with the fat finger is when he gets the execution or we send an execution out that occurs and it goes out to 20 different customers. What happens after that, what else did they do once they got the execution to compound the error? So the risk is just not at the exchange level. It's got to be right across the board. Everyone has to contribute.

CHAIRMAN ERICKSON: I tell you what. We have 20 minutes left. Tony, how much time do you need for your presentation?

MR. LEITNER: Three minutes.

CHAIRMAN ERICKSON: Three minutes. That's it. Everything goes wrong in three minutes. Okay. Ed Rosen.

MR. ROSEN: It's an interesting discussion. It seems to me that the question about whether a trade should be a locked-in trade or not a locked-in trade is actually a very different question from the question of how we deal-- what is the best way to prevent the problem from arising in the first case, because at some point the risk is so mitigated that you're not worried about the risk of a locked-in trade.

One of the interesting things about the discussion is that usually, as a matter of policy, you prevent disruptions to the market by creating the incentives to address the issue where there is the power to control and prevent the occurrence of a mistake.

Risk management is one set of functionalities that can be provided. The FCM can provide a set of functionality. The exchange can provide sets of functionalities. It's not necessarily a customer versus a member issue. Anybody can have a fat finger or bid through the market, but there are all sorts of mechanisms that one could put in place, whether it's a dialogue box that says do you really mean to be this far from the bid ask, or do you really mean to be trading in this size under these circumstances? But it seems to me most productive way to come at this issue is to focus on what practical solutions exist and are implementable at the front end to mitigate the risk of this, because that's the only way to ultimately solve the problem.

CHAIRMAN ERICKSON: Hank.

MR. MLYNARSKI: Following on Ed's point, the software industry and also some of the newer exchanges

themselves have built some of this in response to industry demand. I think Scott mentioned a couple of things as well: the price limits, where an order can go in, order sizes and things like that, order size maximums. One of the interesting things that is driven by the client, the ultimate user of the system, is that they want them all optional because they all want to go fast.

And some want to go faster than others. So I think the interesting dilemma is who imposes what on the requirements to have them in place or not, or is it buyer beware at some level? You make them available, and how do you mandate, if you will, or have legislation that says you have to have something in place or not? Or just that it is available and if available, then you take your chances, but I think the industry is making great strides in this area because it's had problems.

Obviously, you learn by your mistakes, but how do you actually require implementation if then they're available if they become optional?

CHAIRMAN ERICKSON: Chris.

MR. CONCANNON: We've had a lot of experience with error trades or clearly erroneous trades. We constantly are

pushing the firms that connect to us to implement price jacks, size jacks. We do have a size limitation on the system to protect ourselves. What we've done after a year of having "clearly erroneous" policies and being frustrated by having to decide what trade stands and what gets broken, we implemented a fee so there was a cost to actually filing to break a trade, and that cost was borne by the actual subscriber.

So if they had customers with a lot of fat fingers, they would pay a price to actually get those trades broken. We took that money, and we rebated it as an inconvenience rebate to the actual subscriber who had the trade broken or even just questioned. So you could file, you might not have any trades broken, but you paid the fee to file. And it was a per-share fee that was selected carefully to suggest that if it's within range of the market, don't file. If it's out of range and it makes sense, then it's worth to actually file for your customer.

It's reduced our clearly erroneous filings by about 40 to 50 percent. So it's been a big help, and we're not collecting any revenue, but the rebate to the members who are inconvenienced helps a little bit.

MR. McBRIDE JOHNSON: Very brief. The next time I have a particularly miserable day, I will remember what Bryan has to get up and do everyday.

[Laughter.]

CHAIRMAN ERICKSON: Or night as the case may be. With that, why don't we go ahead and turn it over to Tony for his presentation on disasters.

MR. LEITNER: Thank you. I'm another talking head without a presentation to show you, but just a couple quick comments. Number one, we realized as we were discussing our various topics that we did have a progression, sort of segueing into mine from the erroneous trade policy, and I think that we also see a bit of a full circle aspect here because I keep looking at Yvonne here and we're shaking our heads at each other, yes, this does come back to policies and standards, at least to take care of the intermediary issue.

It doesn't take care of Charlie's issue because Charlie goes, you know, right to the heart of this second matter which is what is the receiver entity to do, and the issue with regard to the Nasdaq marketplace, of course, illustrates that the flexibility of the ECMS to have a

clearly erroneous trade policy can be, in fact, clearer than Nasdaq's own policy.

In fact, it is clearer than Nasdaq's own policy. So this is an area right now where the landscape is awful choppy at every level. There really aren't standards set yet, you know, at almost any level. So what am I going to talk about? I was going to talk about hurricane risk and earthquake risk. We have bonds that you can buy and sell to bet on hurricane risk and earthquake risk.

Seriously, when I first talked to Tom about what this topic was, I said, you know, a couple of years ago, we thought we would get a very bad hurricane in New York on a Friday, and it happened to be an expiration Friday. The S&Ps were all going to settle. So the question that some of us were asking each other: well, okay, what happens if the New York doesn't open, and what happens if there is no price?

And the answer was, well, futures do one thing and the options do another. So there is no convergence. One looks back. The other looks forward. So some of us called the CFTC, and some of us called Bob Colby at the SEC, and we said what can you do about this, and they said nothing.

We said, well, that's not good. A lot of people will be injured. That was taken care of eventually by rulemaking to rethink how those contracts would settle just in case something like this happened again. Then I was talking with someone else the other day and said, well, you know, there was an earthquake in San Francisco, and the P-Coast got closed for a week. But they didn't stop trading. Everybody got on a plane and went somewhere else.

The options traders landed in the CBOT or they came out to New York and after a little while they gave them some space and phones, and they could continue to trade. It occurred to me that, well, that's all well and good because, you know, floor-based systems, you can maybe survive that way. But what do we in an environment where we, in fact, become more and more dependent on technology and we have, in fact, linked markets, securities and futures, indexes and so forth.

We have straight through processing. We have connectivity all over the lot, and one of the problems with all of that is that if anyone single part of it goes really bad, and notwithstanding all of the backup and everything

else, if it goes really bad, who has the authority to do anything about it?

Now, there are really two questions here. Number one, who has the authority and, second, how will it be used? A question that was raised--I think, very interestingly for those of you who didn't see it--by Richard Lamb, Dick Lamb, in a paper called "The Need for a More Definitive Policy for Government Intervention in Perceived Market Crises," which was published in this spring's Derivatives Quarterly.

Now, Dick was actually focusing on sort of LTCM and whether the Fed did the right thing or didn't do the right thing. Of course, we all can debate whether the Fed actually intervened at all, who cares? The fact of the matter is that Dick's conclusions are kind of interesting conclusions because he says, assuming that there is authority to intervene, that the government should think very carefully and clearly about and be very clear about defining those circumstances in which it will intervene and what it might do.

I'm asking to some extent the first question, which is where you have multiple regulators in the marketplace, who has got the authority to do anything? Is

it there? Is it centralized? Or is going to be sort of jawboning? I asked to just remind myself what's in the statute right now. I don't think there is very much in the statute, but there is something in Section 2 about liaising. The Commission shall maintain communications with the Department of Treasury, Board of Governors, the Federal Reserve, and SEC. Of course, some of this arises out of the '87 market break, so-called. We were all out at Chicago Kent. Actually that was good because the regulators were actually all there, at least for the first part of that downturn.

So maybe that started everybody talking together. The President's Working Group grew out of that, and there clearly is today a great deal more communication than dialogue among the financial regulators than there used to be. But if you actually got past the finger-pointing and down to cases about what you would do about something, and, of course, it might make a difference whether it affected the banking system or it affected a securities market or if it affected the commodities market, that doesn't mean that the regulator in the unaffected market should be perilous to act as well. The question is, for example, who can declare

a holiday, who can, in fact, stop another market from trading or, in fact, make it not stop trading?

So action or interaction, it seems to me, is a useful question. So what I throw out for this group and for our hosts is that it may be worthwhile to, in fact, have the staff examine a little bit more carefully what the current authorities are among the financial regulators for the ability to intervene, and what is truly, you know, that thing you cannot anticipate. It could be an act of God. It could be a failure of a significant system. It could affect the clearing system. It could affect the front end trading system. It could affect virtually part of the straight-through processing issues that Charlie mentioned before.

What I'm most concerned about here is authority and clarity, and then you get to the next level of questions which is what the policy should be for when you, in fact, do anything about it. That's it.

MR. CRAPPLE: So what's the answer?

MR. LEITNER: No, I just said I would ask questions. What I'm proposing is that we first find out what the baseline is, because I don't think that it's all that clear. Ed Rosen knows it all, of course. So he'll

maybe guide us. But I thought it was not clear who had authority to act where.

MR. ROSEN: Thank you, Tony.

MR. LEITNER: I told you I'd call on you, Ed.

MR. ROSEN: Thank you, Tony. In thinking about this, I'm not sure that the question of what is the precise scope or how precisely the authority of the various regulators is delineated is really the important thing, because in all candor, if you have an event of that kind, the likelihood that there is a switch if a person but had the authority to flick it would solve the problem is, I think, to my mind, somewhat over optimistic.

I really wonder whether or not the real question concerns the mechanisms for prompt coordination and communication with the relevant markets and establishing the infrastructure which would facilitate action promptly. Generally it's hard for me to imagine many scenarios where you could get a solution where there wouldn't be a consensus that would be shared between the industry participants that are affected, maybe not all of them--that's why I say consensus--and the regulators, and therefore, it seems to me

the infrastructure for that is probably more important than clear delineations of authority.

And I agree with you, I don't think it is clear, and I think many of us might be scared if we saw what would be necessary in black and white in order to give broad enough authority to make it clear that those steps could actually be taken by any regulator that would need to. That's my two cents.

MR. LEITNER: I guess my reaction quickly to that is, yes, and that it will be even more necessary in an environment that whatever will happen will happen probably faster than it does now because everything is speeding up. So the likelihood of there being an issue which is felt will be felt quickly and will probably need a response within hours or half hours and not days.

CHAIRMAN ERICKSON: Phil.

MR. McBRIDE JOHNSON: I don't have too much difficulty finding the right to pull the trigger, at least here, because of the emergency authority of the Commission. Mercifully, it talks in terms of the market being unable to accurately reflect the forces of supply and demand and a dead wire certainly does that.

So I suspect we're pretty safe from that standpoint, but Tony is absolutely on the money when it comes to the question of what's next? To know to a certainty that something is going to happen, but not to know what that is likely to be, is a thriller, and markets don't like thrillers.

CHAIRMAN ERICKSON: Okay. Let me just ask one general question of this panel and anyone else who has got a view. It seems a lot of things we've talked about today are looking for ideas of standards or what do we do in this kind of event that Tony has put out on the table for us, given the fact that we've got global markets, trading many of the same products.

I think the "what next" question is even more interesting, especially in light of foreign markets that may be trading those same linked products. Is there another place that we should be looking? How do we extend this dialogue, not only here in this forum, but also looking at the FIA form where you've brought foreign markets together, or through IOSCO at which the Chairman represents us in a number of capacities as well. Should we be looking beyond just our borders with these questions?

MR. DURKIN: Absolutely. Not just with respect to the things we've talked about today. Clearly the Chairman has taken an initiative in terms of information sharing, and I'm glad to see that that's one of your top priorities to make sure that it doesn't lose its momentum, because we aren't there in terms of all of the agreements that we've put in place over the years. You can go down the litany of them, when there is a problem, the information is still not flowing.

And that leads to risk for all of us. So absolutely, we have to do whatever we can to bring cross border relations into this dialogue.

MR. LEITNER: I guess I would add that, first of all, you would know better than I what IOSCO is working on and the degree to which regulators across markets are talking to each other. I think that I would add that the standards, building standards, are going to be a key and that's going to be as much a private sector issue as a public sector issue, but it may well be driven by public sector action.

Somebody mentioned before the BOSL or BIS or whatever the guidelines are that are going to begin to

quantify in capital terms the operational risk charges of some sort of other. I don't like, of course, the idea of one-size-fits-all, because not everybody is equal in terms of the way they manage operational risk, and you ought to get brownie points for doing it right and doing a good job at it.

One could say that's the same for exchanges, that somehow a grade or a report card that people could then use to determine where they want to trade might not be eventually a bad idea. How you set that, who knows, because from a competitive point of view, there will be potentially a hew and cry.

On the other hand, the exposure of these issues, just talking about them, is helpful, number one. Number two, being able to shine light on those folks who are maybe not doing as good a job as they could or should is not a bad idea maybe. But it all begins and ends with the development of some baseline best practices or standards. Then the question is, do they become codified and then do they become consistent?

I mean this is the point I was making earlier about this whole order entry system. Should exchanges on

the receiving end have consistent rules about fungible product now? If you've got your own product, that's your own product and futures markets are used to do that. You're not used to having stuff that actually trades equally in a lot of different venues, but just ask the option markets--or Nasdaq.

So in those environments, consistency across markets is potentially important as a risk management matter, particularly as it regards these order entry standards. It seems to me you have to at least ask a question whether execution venues as they become better and better ought to have different protocols for how you get there, because that makes it more difficult for the order entry firm to program their systems to prevent bad things from happening and still respond to customer demand. As Hank said, everybody wants to get there in the fastest--well, not everybody, but some people want to get there as fast as possible.

MS. DOWNS: I just have one point, though. We can't lose sight of the customer protection issues associated with all this as well. We just can't come and say there are standards, but not have any minimums, because

I think we're potentially harming customers who aren't aware of how those standards work. As we've seen in some of these systems that evolved, where some of the capacity issues and things like that weren't addressed, many customers were actually harmed in their ability to use markets. So I don't think we can lose sight of that as well.

CHAIRMAN ERICKSON: Dan.

MR. CUNNINGHAM: Tom, thanks. This is Dan Cunningham. Going forward, it's interesting hearing all this. The Commission probably is going to have to have two very different perspectives. One is customer protection, and that's a U.S. issue. When you think about emerging trading technologies five years from now, the most effective systems almost all are certainly going to be truly international. And there you're going to have to deal on a regular basis with leading regulators from other countries in order to assure at times and prices you have access to the necessary information.

You're always going to need information in a crisis, and it may be there are times when the markets need liquidity. That's less common, but if that's going to be done in that new environment, that's probably going to have

to be done on a coordinated, international basis as well in certain situations.

CHAIRMAN ERICKSON: Okay. Any other questions or comments people would like to make with respect to this panel? Okay. Well, now we get to go to the fun part, what may be a little bit more of a challenge.

As I said at the beginning, I have great hopes and every confidence that this committee will be able to hear a number of issues, as we have today, mull on them for a little bit, and try and identify a plan for moving forward. This means identifying priorities and issues that you think really need to be addressed in some kind of a meaningful way and developing a plan of action for moving ahead.

Ideally, I think that this is a committee that would benefit greatly by having two large meetings like this in any given year and then be able to identify discrete projects where it could break down into multiple subcommittees for reports of those meetings. I'm going to throw the floor open initially to see if anyone would like to talk about some things.

I know we've heard a lot about standardization and other issues, but--okay. Yes, Larry.

MR. MOLLNER: Being a customer of the market, I will address being a customer of the market the same way I did last time. Charlie brings up a very good point, and that is that straight-through processing to the customer is apparent because all of his problems don't come to me. However, with multiple trading systems, multiple identical markets that we will have, I will still be burdened by having an account at Lehman Brothers where I trade equities, where I trade options, where I trade futures, where I trade FX off their FX desk, and I get multiple statements.

This is part of the regulations for segregation that cause them to have to give me different statements. I, as a customer of the market doing all of these things now off of my desktop, would like to have one statement and would like the Commission to address the ability of the customer to choose which safeguards he wants, the security safeguards or the futures safeguards. Thank you.

CHAIRMAN ERICKSON: Thank you, Larry. Any other, any reaction to what Larry has put on the table? Charlie?

MR. NASTRO: Good luck.

[Laughter.]

CHAIRMAN ERICKSON: Charlie, are there any points from your conversation or discussion that you think might be appropriate?

MR. NASTRO: No. I think "what's next," as Tony says, is really the question. I mean, I think that what we've seen in the past is nothing compared to what we're going to see with the electronic technology and trading.

You know, Bryan, we've problems. We've seen problems in Europe. Every market has--it's a major event, and you really don't know. You got to figure out what to anticipate. You may have emergency powers, but you may have the whole place shut down, and what do you do, how do you manage the exposure?

These are issues I think need to be talked about. You know, we need to have some more technology people to talk to and get a sense from them where of things are and what's happening out there.

CHAIRMAN ERICKSON: Yes, we're locked in now and we're not leaving until we can settle this. Yes, Richard and then Ed.

MR. FRIESEN: Yes, well, as a software vendor, it's been really fascinating to sit here and look at global

and systemic problems and the particular problems around error trading. As we look at the next generation of technology, I think that a lot of those things are and can be resolved if, in fact, we keep up the communications.

As I look at the structures that we're evolving on the next generation, a lot of the issues here, in fact, are being dealt with. So I think that in venues like this, bringing on more technology companies is useful to make sure that the issues that we have as an industry in general are being addressed adequately on the technology. Even though technology is being developed faster and faster, there is still a long lead time, especially if we're talking about the kind of enterprise level software that we need, the kind of redundancies we need, the kind of availability.

When you get to those kind of levels, changes are very expensive, because any one change in the system, of course, has to be QA'ed throughout the whole system and tested, and therefore bringing these issues early on into the technology development I think is going to be very helpful. And this venue has been very helpful to me here today.

CHAIRMAN ERICKSON: Ed and then Doug.

MR. ROSEN: I will make this my last comment. Following up on what Larry said, it seems to me that as platforms try to be systems for the execution of a broad range of products that cut across different regulatory structures, and firms offer internal platforms to their customers on which they try to offer as consistently as possible the broad range of products, I think some effort on a going forward basis to try to harmonize the regulatory initiatives of the CFTC and the SEC in particular so as to try to promote consistent standards and requirements would be an extremely useful perspective to take and possibly significant cost savings to the firms going forward.

CHAIRMAN ERICKSON: Maybe the Chairman would like to comment on those cooperative efforts.

ACTING CHAIRMAN NEWSOME: I'm listening.

CHAIRMAN ERICKSON: Doug.

MR. GARDNER: Well, a couple of things. First, for some things that Charlie said, some things that Richard said, we went through a bomb a long time ago. You're right. Those things happen. And you close the marketplace, you have to be very available for it. So right now there are contingencies in place, but it only is as good as the lowest

common denominator in any of these cases. We connect to every firm in this room and some others.

Some people have them. Dino. The good does and some of the rest of you don't. So it's just not going to help unless everybody is on the same page, and that cannot be something that's going to be--it's a cost issue for a lot of these folks, and you can't regulate that. You can't tell people to do it at the level it has to be done to be really redundant.

The next case is what Richard said, the technology to address a lot of these issues. It does exist today, but Hank said it right. People turn it off. Every day, every moment, you can stop every--a lot of things--the fat fingers and all these different types of things if you want to. But they don't want to. And if you trade trillions of dollars through a system, you see every single problem. If someone said--I think Tony said before--a lot of the issues in terms of market manipulation now that you have technology, people can game the system less.

Well, you all have extraordinarily smart people working for you and they can game any system. And they'll game it until you fix it and then they'll game that. So

these issues are going to continue no matter how good a technology comes, no matter what we try to do. The technology exists. It's the implementation, the execution and actually the use of it this is somewhat lacking.

CHAIRMAN ERICKSON: Tony.

MR. LEITNER: It seems to me that just to try to respond directly to your challenge to us is what are the two or three things the Commission can be doing? And I think from the sort of consensus that I've heard is that there is a process and a decision about whether there are any kinds of regulatory initiatives that are emerging?

As to the regulatory initiatives, I haven't heard any, frankly, other than--but there is an underlying issue which is what is the attitude or policy you bring to those exchange regulations that you get to approve. You're approving less now because you've changed your regulatory structure, and yet--and this goes to the coordination point--that Ed said the SEC still gets to approve everybody else's rule.

So to the extent that we've got linked markets--that's where I come back to continue to focus on them--the

dialogue has covered an awful lot of scope. So I think one wants to potentially focus on the doable.

The first thing I would suggest is doable is there are a couple process things that clearly be put in place. One of them is in figuring out how to enable or encourage the exchanges to get together to talk about creating a greater degree of connectivity standards. To the extent the exchanges are worried about talking to each other because the Department of Justice is after them or might be after them on antitrust issues because that is now a concern, there may be things the Commission can do to enable that kind of discussion to go forward in a regulatory context.

So I would think about that because that's theme one. Theme two, the international situation, I think is absolutely worth refocusing on. As a process matter, looking at the mechanisms that are already there for dialogue, whether it's through IOSCO working groups or whatever, does bring financial regulators from the markets together. I think the point is that there may be some issues that have come out of this discussion here which it is worth putting on the table at an international level that may not be there now.

So that might be a second direction. And third, I would still vote for a staff survey of the current landscape of the authority of the financial regulators to act in a crisis. The CFTC has a set of powers under its emergency powers. I'm not sure the SEC has the same powers. Should they be consistent or not? But a study of what they are might be helpful. So those are three areas that I would propose.

CHAIRMAN ERICKSON: Phil.

MR. McBRIDE JOHNSON: You mentioned the FIA and IOSCO as organizers for international coordination. Both are exceptionally good gatherers, if you know what I mean by that. But the people who go to the meetings are without any authority, at the time at any rate, to agree to anything. And once it bleeds back into the hierarchy and these various agencies around the world, frequently you get some very, very well done studies identifying problems.

Very rarely do you get anything by way of a consensus that can become an action plan for the various agencies. Without wanting to get anyone mad at me, I think you might want to encourage what I'll call a second generation IOSCO that comes to the table with perhaps a

little more authority than it has at the present time. And even if it cannot commit those agencies to a particular outcome, it can at least have some forceful recommendation to make back home that will be taken seriously there.

MR. GAMBARO: Tom, I know I've been on a number of panels and discussion groups, FII, along with the FIA, in conjunction with the CFTC, the NFA, and Doug and a bunch of other fellows in the room too, Bryan. What happens to all those studies that we come out with with best practices, standards and all other stuff with people who are in high ranking positions at the exchanges, the communities, the firms, the CTAs, and a wide variety of the community coming up with saying why don't we do this or why don't we do that?

We never hear after we spend six, 12, 14 months on a process that anything is coming through. I know we spent a good year maybe with a group on the FII coming up with standardization practices. I know we're sitting now with Yvonne on the NFA that is coming out with some best practices. What happens to those things once they're completed? I know they put out a book and then it's put in the dust pile or what goes on?

CHAIRMAN ERICKSON: Yvonne.

MS. DOWNS: Well, in our case, we distribute to our membership, we actually put it in the guides that we give to all of our firms, what we call the self-audit guides. And then we actually incorporate in our audit programs to verify just what people are doing with regards to those practices.

Not all of them are rule violations, but certainly it gives us a clue as to whether people are going down the right path and we make recommendations accordingly. So we do act on the ones we produce.

MR. GAMBARO: My problem is I don't know if the word has gotten out that that's happening. I mean we see it. You might go into the net and bring up the CFTC and see, you know, 400 pages of something, but there is nothing that comes out that says this is the way we should go. We should embrace FIX 4.2 as the protocol for APIs. We should do this. We should do that.

I know in the SEC world when I was there when we first went to QCEPS and we went to standardization as far as format, when you went to an EOR process, it was that. It was a book that said this is how you're going to do it, and everybody did it that way. We don't have that in the

commodities world, and I think we should. With all the business practice discussions and operational and technical discussions that we have from panels and what not, that the hierarchy sits on at the exchanges, and certainly from, like Charlie's standpoint, nothing seems to come out that says you haven't wasted your time, and you just didn't put together this voluminous document that nobody is going to read or come up with an executive summary that says we should start employing this or the Commission should come out with rules that said we will do this. I haven't seen any of that.

CHAIRMAN ERICKSON: That's really the challenge, I think, that this group can wrestle with. I look at Tony's suggestion--talking about the staff survey of authorities of various regulators--and that's something that someone could take charge of, Tony, with the cooperation of staff. I'd like this group to take a serious look at whatever comes out of that with a recommendation to this Commission, or wherever, about what the appropriate action or inaction may be or what the next step might be.

That subcommittee could recommend that the Commission pursue greater dialogue with the President through the President's Working.

Or specific proposals for rules or guidances or some kind of statutory interp. But those are the kinds of things that I think address your concern, Patrick, about this being more than something that sits on the shelf and collects dust.

MR. LEITNER: Just regarding the point that I think Pat was referring to--about the kind of nitty-gritty stuff that really would help the industry--I think that one thing is the standardization of protocols. And why isn't that happening? I mean I don't know why that's not happening which is why I said that the CFTC might have an enabling function there. That's got to be, I think, kind of a private dialogue with the exchanges about why it's not happening. To the extent that there is nervousness about getting together, there are ways to enable that to happen so they can get together, but I think obviously it's also got to get driven by a common dialogue with an interested private sector really driving it.

And it's getting the right people in the room, but the exchanges feeling they have no problem sitting there talking about all this, and they kind of have to.

MR. GAMBARO: Tom.

CHAIRMAN ERICKSON: Yes.

MR. GAMBARO: I know that every time you try and do something new--like we're putting up our own EOR now which has been out there for 20 years, but we finally got there--the first thing you do when you talk to the FCM community is that we want to connect with you because your API is different than the CME, the CBT, the NYMEX and what not.

If we just said use "x", everyone uses it, the connectivity would be there. When you try to connect and your pipeline is going down to the exchanges, it will be there. There won't be a whole major effort for someone to reinvent the wheel at each of one of the FCM community back offices. If it was just as simple as that, just say that's the way it's going to be, and that's the way it's going to be, and everybody is going to have to conform. It's just that simple and it makes life easier, I think, for everyone.

CHAIRMAN ERICKSON: Charlie.

MR. NASTRO: I don't think our industry has the clout to get that done. Okay. The securities side got it done because there were significant clients who said that's the only way that we're going to do it. We don't have that significant client base. We're all fragmented and diversified. Maybe Tony is right. Maybe somehow the Commission can bootstrap this and get everyone together because maybe there's just been too much talk amongst ourselves if we try to do it ourselves, and try to establish reform to see how it can happen and start the process, because there is a little process going on here.

This is an FIA working group, and I don't know how much they have moved forward. I know that we participated in it. But this is too important because it's going to set the stage of where we are for the next five or ten years. It's going to set whether we're going to be in this business in the same way that the securities side is undertaking in electronic trading.

CHAIRMAN ERICKSON: Doug.

MR. GARDNER: And the other problem with that is the next one will be, "what should the error handling rule be" and "what should the whatever the next problem is" and

these things will be resolved whether by hook or by crook by where the business is sent under the new regimen. There's going to be a lot of competition. So business is going to go some place and if the CBOT has an error rule that everyone hates after awhile, either they're going to change it or the business is going to go to BrokerTec or to somebody else or somebody else.

If the protocol that you put out doesn't work, and it's going to make Dino and other people not connect to it, you know, you or I can go and create--take Scott's or Brett's or whoever's protocol and just work it into ours. But the problem is that any mandated requirement, I think, will be the wrong answer. Chris said a FIX 3.9 to the FIX 4.2. FIX is not FIX is not FIX. There is no "FIX." It's a lot of fixes.

Morgan Stanley FIX is different than Goldman Sachs FIX. You know, messages. So it's just not a simple answer. Standardization is great. Standardization that's mandated is not going to work.

MR. GAMBARO: Tom, you have to start someplace, and I think standardization will work. It worked in the equity world. Why won't it work in commodities? And if we-

-there is a document that's called "FIX 4.2." If you read it, it's a standardized protocol. And, no, 4.2 isn't different from A to B to C. They have to use the same protocols. They might not use all of FIX, but it's there, and my 4.2 FIX is the same as Bryan's. There's no problem with that.

I mean but you got to start someplace. If we take the attitude that the heck with it, tomorrow we'll change it, well, maybe we'll change it, but let's start someplace.

MR. GARDNER: I don't disagree with that, Pat. I just think that it's going to be something that the group will figure out, not the Commission.

MR. LEITNER: Can I make it very clear that my recommendation was that the Commission be an enabler and not a mandator. I was absolutely not proposing that there is a solution here that's a regulatory solution.

But to the extent that, you know, that it's currently dysfunctional, and I don't know what the sources of that dysfunction are, it may well be that there may be concerns about competitors getting together to talk. If there is a regulatory basis on which folks can get together,

that actually helps because then you can, you know, because you can get together and talk about it.

I mean I'm not an antitrust lawyer, but I just don't know whether that's a concern on anybody's part. But if it is, actually the Commission can play a role.

MR. NASTRO: That was my point, too, with the Commission's involvement, exactly what Tony said. We need a forum. And you can get FIA. You can get a whole disparate group and then some show up and some don't show up. If you have a forum that talks about a standard, and I agree with Pat's focus on 4.2, we just need a protocol, a standard protocol. And we need someone to help us get there.

We're getting there little by little, but we have to start running on this. We can't be walking.

CHAIRMAN ERICKSON: As an enabler, a facilitator and a mandator--that's a new word for you--I sense that there is at least some consensus around this, and there would be an interest in participation in some kind of a core group to look forward into the issue of standardization regarding protocols.

And what I would like to know is if one or two people would volunteer to be primary contacts and then we

can build a group around that, at least to begin to study the issue and to look at developing some kind of recommendation for the larger committee.

MR. JOHNSTON: CME would help you.

MS. DOWNS: I'll volunteer, too.

CHAIRMAN ERICKSON: Okay.

MR. FRIESEN: ePit will help out if we can.

CHAIRMAN ERICKSON: Okay. All right. We are wrapping up close to our scheduled time of dismissal here, but is there anything else that we can discretely pick out as an issue that people would like to talk about. Scott, I don't know if you wanted to put on the table the idea of audits in any greater detail or--

MR. JOHNSTON: No, I thought I laid out the issues pretty clearly. Hopefully I did.

CHAIRMAN ERICKSON: Yes, John.

MR. McPARTLAND: Yes. I do have a suggestion for a subcommittee. There is an international best practice of fair, equal and open access to markets, and technology is being used to create unfair and unequal access to markets. Any number of people has talked about the fact that they are absolutely committed to electronic markets. So what's going

to happen is that this is going to become more and more important.

There's an exchange that throttles bandwidth based on whether you're a market maker or a public client. There's an exchange that will not allow a public client to enter a computer-generated order. I think it might be a good idea to at least catalog either the inadvertent technology or the tactical initiatives that create unfair and unequal access to markets and bring them back to the committee and say, "do we care" and if so, what are we going to do about it. I think that's consistent with the core mission of the Technology Advisory Committee, and it's probably consistent with good public policy.

CHAIRMAN ERICKSON: Any other comments with what John has put out on the table?

MR. GAMBARO: One comment. Ron Filler at the last Boca conference gave us a document that was about--I don't know--100 pages thick. But it contained all the exchanges that have ETS environments. It contained a lot of information, API information, some of the stuff that John was just talking about. I think that would be very helpful. And maybe the FII, FIA, CFTC study that we did last year,

the conclusions rendered as far as standardization best practice should be given to the group along with Ron's document. I think Marianne probably has a copy that she gave to the panelists and also the people like Ron and NFA have.

It's important that everyone see what's out there and what's been talked about, because a lot of discussions we've had here have already been talked about probably a half a dozen or a dozen times.

CHAIRMAN ERICKSON: Technology at Its Finest. We've got the report. John, is this something that with the assistance of staff resources here, that you would be willing to take up and report back even individually at the next meeting?

MR. McPARTLAND: Okay.

CHAIRMAN ERICKSON: All right. Any other last comments? We can get out of here about on time. Okay. Well, again, thank you very much for your time. This has been of enormous help to me, and I'm sure the other commissioners share those sentiments. Thank you very much.
[Whereupon, at 5:00 p.m., the meeting was adjourned.]