Principles for Direct Electronic Access to Markets

Final Report

TECHNICAL COMMITTEE
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS

FR08/10 **AUGUST 2010**

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Chapter 1 Introduction

In February 2009, the Technical Committee of the International Organization of Securities Commissions (IOSCO) published a Consultation Report entitled *Policies on Direct Electronic Access (*Consultation Report*)*.[1] The Consultation Report identified and discussed the benefits, potential risks and concerns that were associated with the use of direct electronic access (DEA) arrangements that permit customers of market members to enter orders into a market's trade matching system for execution.[2] It also addresses issues raised when a non-intermediary such as a hedge fund or proprietary trading group becomes a market member. The Consultation Report is based on surveys of regulators and industry conducted by the relevant Technical Committee Standing Committees on the Regulation of Secondary Markets (TCSC2) and the Regulation of Financial Intermediaries (TCSC3). Although the Technical Committee recognized the market and regulatory benefits associated with the use of electronic execution systems, it also recognized that the increasing use of electronic access raised several regulatory challenges to markets, intermediaries and their regulators.

The Consultation Report identified three key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

(i) Pre-conditions for DEA
(ii) Information Flow
(iii) Adequate systems and controls

For each of these elements, the Consultation Report identified possible principles providing guidance in the DEA area, and invited comments from industry and the general public on these possible principles or on any other aspect of the Consultation Report. Following the publication of the Consultation Report, the relevant standing committees of IOSCO engaged in the review of this issue, prepared a Feedback Statement (Appendix II), summarizing the comments received during the consultation phase, and provided the Technical Committee's response to the comments, including changes to the proposed principles on DEA.[3]

This Final Report on *Principles for Direct Electronic Access* (Final Report) sets forth principles to guide markets, intermediaries and regulators under the three elements noted above. The principles are premised on the recognition that markets, intermediaries, and regulators each must play a role in addressing the risks of DEA. The Final Report sets forth elements regarding principles pertinent to DEA, including those that address pre-conditions for DEA, information flow, and adequate systems and controls. A key aspect of the principles provide that neither the market nor an intermediary should offer DEA unless adequate pre-trade information is provided, and both regulatory and financial controls,

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1 *Policies on Direct Electronic Access*, Consultation Report (IOSCO 2009) available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD284.pdf.

2 See Appendix I for definitions used in this report. The trading model of a Customer calling the intermediary or sending an internet order to the intermediary is not considered to be *direct access* for the purposes of this report.

3 The consultation process resulted in 33 responses from North American, Asian and European jurisdictions. Of these responses, 16 were from intermediaries, nine were from trade associations, five were from exchanges, and three were classified as *other*, including a data vendor.

including automated pre-trade controls, are in place to enable intermediaries to implement appropriate risk limits.

In adopting these principles, the Technical Committee continues, consistent with the policy of flexibility that is expressed in the *IOSCO Objectives and Principles of Securities Principles*[4], to respect the right – and responsibility – of firms to determine the specific types of pre-trade controls that should be implemented and the appropriate risk limits that should apply to any client accessing markets through DEA within the parameters set by regulators. Regulators should retain the power to allow or prohibit any form of DEA as well as to establish requirements in the DEA area, including pre-trade controls and risk limits, and should also exercise regulatory oversight over the decisions made by clients, intermediaries, and exchanges. The Technical Committee observes in this regard that globally-active exchanges have developed and continue to improve the risk management tools that are offered as part of their DEA systems. In light of these developments, the imposition of any specific quantitative or technological standards would need to be consistently monitored to ensure that they account for such developments.

In general, the arguments raised by respondents with regard to the principles, and in particular with respect to the need to implement automated pre-trade controls, were well thought out and considered carefully by the Technical Committee. In light of these comments, and after its own careful analysis, the Technical Committee concluded that the need for markets and intermediaries to make available and utilize such automated controls rests on the following basic proposition:

> *Whatever level of risk a firm accepts, it must never be infinite. Rather, the risks undertaken must be limited to an appropriate level commensurate with the capital and other financial resources of the firm and the prudent management of both credit risk and any risk to fair and orderly trading. In an automated trading environment, the only controls that can effectively enforce such limits are automated controls.*

To the extent that regulators establish requirements for clients, intermediaries, and exchanges in this area, they should be consistent with this proposition.

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4 *IOSCO Objectives and Principles of Securities Regulation*, IOSCO Report, April 2008 available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD265.pdf

Chapter 2 Background and Purpose

As the way in which exchanges and other markets operate has evolved, so too has the means of access to these markets.[5] Securities and derivatives exchanges are today overwhelmingly electronic, which has facilitated their operations globally through various forms of communication. Spurred by the increasing demand by DEA Customers[6] for access to global markets, the means to access markets has evolved through continual innovation.

At the inception of the project that led to the drafting of this Final Report, the Technical Committee was confronted by diverse terminology used to describe the specific arrangements of DEA in various jurisdictions and markets (e.g., "direct access," "direct market access," and "sponsored access."). Moreover, even common terms-of-art carried with them different meanings in relation to local market structures. The Consultation Report therefore adopted working definitions for three major DEA pathways: *automated order routing systems* (AORs), *sponsored access* (SA) and *direct access by non-intermediary market-members*, each of which is defined in Appendix 1.

For the purposes of this Report, DEA is defined as the following three major pathways:

Automated Order Routing through Intermediary's Infrastructure (AOR)
This describes an arrangement where an intermediary, who is a market-member, permits its Customers to transmit orders electronically to the intermediary's infrastructure (i.e., system architecture, which may include technical systems and/or connecting systems), where the order is in turn automatically transmitted for execution to a market under the intermediary's market-member ID (mnemonic).

Sponsored Access (SA)
This describes an arrangement where an intermediary, who is a market-member, may permit its Customers to use its member ID (mnemonic) to transmit orders for execution directly to the market without using the intermediary's infrastructure.

Direct Access by Non-Intermediary Market-Members
This describes where a Person, who is not registered as an intermediary, such as a hedge fund or proprietary trading group, becomes a market-member, and in that capacity, in the same way as members that are registered intermediaries, connects directly to the market's trade matching system using its own infrastructure and member ID (mnemonic). Such non-registrant members must enter into clearing arrangements with and become Customers of a clearing member intermediary.

The ability to transmit orders directly to a market in real time gives DEA users greater control over their trading decisions and reduces latency of execution time. Overall, the different means of accessing markets electronically have facilitated the establishment of globally competitive markets, and have greatly benefited market participants and their DEA Customers by permitting them to transact complicated investment and hedging strategies on a global basis in a matter of milliseconds. The use of electronic systems also has regulatory

5 See definitions in Appendix 1.

6 See definitions in Appendix 1.

benefits, such as the generation of electronic audit trail data, and the enhancement of both trade transparency and the ability of markets, intermediaries and other market members to develop and apply automatic risk management controls as well as the ability of regulators to oversee the establishment and use of such controls.

Nonetheless, IOSCO has identified areas of concern where market authorities[7] may determine that guidance is appropriate. For example, DEA has introduced several regulatory challenges to markets, intermediaries and their regulators. Although the nature of the challenges varies depending upon the type of DEA, they include:

- To what extent a user may access markets outside of the infrastructure and/or control of market intermediaries, which challenges intermediaries' traditional risk management approaches and may make rule compliance and monitoring more difficult , particularly with regard to market manipulation and insider dealing;

- The creation of incentives for intermediaries/Customers to gain execution advantages based on the type and geographic location of their connectivity arrangements, which raises potential *fairness* concerns; and

- Facilitating algorithmic trading through automated systems, which raises issues of capacity and the potential need for rationing bandwidth. Indeed, some *black box* trading systems are capable of transmitting several thousand order messages to a market in less than a second.

This Report describes current DEA arrangements, as well as the regulatory approaches of IOSCO member jurisdictions. It also identifies the commonalities and differences in approaches as they relate to the controls imposed by intermediaries on Customers' direct access to the market for purposes of placement of orders and intermediaries' ability to review trades on a pre- or post-execution basis[8]. However, the Final Report does not attempt to describe in technical detail the specific features of the multitude of DEA systems in existence.[9] Indeed, the technical nature of electronic access systems is complex, varied and

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7 The term *market authority* is used to refer to the authority in a jurisdiction that has statutory or regulatory powers with respect to the exercise of certain regulatory or supervisory functions over a market. The relevant market authority may be a regulatory body, a self-regulatory organization and/or the market itself.

8 Broader issues raised by screen based trading systems (e.g., issues of system integrity and capacity) were addressed previously by the Technical Committee and thus are not the focus of this Report. *See* IOSCO *Principles for the Oversight of Screen-Based Trading Systems*, Report of the Technical Committee of IOSCO, June 1990 (Screen-Based Principles); and *Principles for the Oversight of Screen-Based Trading Systems for Derivative Products-Review and Addition*, Report of the Technical Committee of IOSCO, October 2000, at p. 5, section III, Part 1, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD111.pdf (2000 Report). In the 2000 Report, the Technical Committee adopted four additional principles that encouraged regulatory authorities to develop cooperative arrangements to address risks that arise from cross-border derivatives markets, to share relevant information in an efficient and timely manner, to maintain a transparent framework for regulatory cooperation, and to take into account a jurisdiction's application of the IOSCO Objectives and Principles of Securities Regulation. *See also*, *Policies on Error Trades*, Report of the Technical Committee, of IOSCO, October 2005, available at http://www.iosco.org/library//pubdocs/pdf/IOSCOPDF207.pdf.

9 In general, the basic technical variations in electronic access range from the *restricted* model of a market providing dedicated communication lines to the trading system as well as all trading software

constantly changing. It is hoped, however, that publication of this report will facilitate a better understanding of the different ways that direct access is regulated and how markets address the relevant issues.

This Final Report identifies and discusses the benefits, potential risks and concerns that are associated with the use of DEA arrangements that permit Customers of intermediaries to enter orders directly into a market's trade matching system for execution. It also discusses DEA by non registered intermediaries in their market member capacity. The Report recognizes that the latter category may not always raise the same issues when compared to AOR or SA. Nonetheless, as noted later in the report, credit risk is a key risk raised by DEA arrangements and a market member who is not a clearing firm poses potentially substantial risk to its clearing firm and the market. It also evaluates the information obtained from markets, intermediaries, and market authorities, both in response to written questionnaires and presentations as well as the request for comment on the Consultation Report.

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and hardware, to more *open access* models where the market permits access through a combination of means, such as dedicated lines and internet, and allows connections using proprietary market software and hardware, proprietary brokerage software and hardware, third-party vendor software and hardware solutions. In this regard, the responses indicate that most markets generally do not restrict the type of end-user technology. In all cases, each market requires that any direct connections to its trading system meet such market's standards.

Chapter 3 Description of DEA Arrangements

A. Qualifications of DEA Customers and non-Intermediary Market-Members

Market-members who are intermediaries have discretion over which of their clients are given direct market access, provided such DEA Customers meet certain terms and conditions outlined below, which are typically set out in written contractual agreements. Intermediaries generally use a vetting process to determine on a case by case basis which of their clients will be permitted to have DEA. A key element of this vetting process is an analysis of the entire risk profile of the potential DEA Customer, particularly with regard to sponsored access. The client's internal systems of monitoring their own risk are closely reviewed by the intermediary, including whether the client has adequate systems and controls to monitor orders and trades on a real-time basis. In addition, intermediaries report that they review closely some or all of the following factors before granting DEA to their clients:

- Familiarity with market rules;
- Degree of financial experience;
- Prior sanctions for improper trading activity;
- Proven track record of responsible trading and supervisory oversight;
- Ability to meet appropriate credit and risk guidelines; and
- Proposed trading strategy and associated volumes.

In many jurisdictions, intermediaries only permit direct market access to clients that are financial institutions, such as broker/dealers, asset managers, banks, introducing brokers, or other types of entities that are supervised or regulated as a financial institution within the jurisdiction. But even where an intermediary permits non-financial institutions to have DEA, the intermediary generally requires a certain minimum level of customer sophistication.

Some markets permit sub-delegation of a Customer's DEA access to another party, i.e. where a DEA Customer is permitted to delegate its access privileges directly to one or more of its own clients. This is used primarily to accommodate structures of the market-member whose affiliates have DEA Customers outside of the jurisdiction. There are rarely any specific market rules to regulate such sub-delegation.

With respect to the access/membership requirements of non-intermediary market members trading only for own account two broad types of requirements for access to the market generally apply. As for all members, these include (i) qualifications of key individuals such as requisite training or competency and *fit and proper* standards; and (ii) structure, management and resources of the potential member. This latter category generally includes: adequacy of internal controls financial resources, technical systems and operational controls; certification of system requirements; and integrity of order routing systems.

B. Identification of DEA Orders

Markets assign each market-member a mnemonic (identifier or *designated code*); and users must input a username and password to access the market trading system. However, most markets' electronic systems do not identify through the market member's IP address or mnemonic the specific Customers of market-members using AOR or SA, i.e., their systems do not support sub-user identifiers or passwords.

Chapter 4 Market Integrity, Risk Management and Other Concerns Associated with DEA

DEA presents various risks to markets and intermediaries that could impact market integrity, including the ability of the market to maintain fair and orderly trading. Trading and credit risks are also key concerns raised by DEA arrangements. Trading risk can generally be described as the risk to an intermediary regarding compliance with market rules applicable to orders sent to the market and executed on behalf of its clients. As for DEA Customers, trading risk arises irrespective of whether this is done through AOR or SA. This type of risk would be less pronounced for the intermediary who simply clears for a Customer who is a member of the market and is subject to the market's rules.

On the other hand, credit risk refers to the risk arising from the fact that an intermediary is normally financially responsible for the trades of a Customer, and which exists for both clearing and non-clearing members, even though the clearing firm may bear the most pronounced risk as it bears ultimate financial responsibility for a trade (although the non-clearing intermediary is financially responsible to the clearing member).

A. Compliance with Market Rules

All markets that allow their members to offer clients DEA by way of AOR or SA indicated that market-members who are intermediaries remain fully responsible for the orders entered by their DEA Customer. For all markets that allow DEA, the market-member who is an intermediary is thus subject to the market disciplinary procedures whether orders are entered by the member or *through* the member.

All markets can impose disciplinary actions upon a market-member for a failure to comply with rules relating to DEA. A number of different penalties can be applied, ranging from warnings (for less severe violations) to the revocation of the permission to trade. In some cases, the market can require the market-member who is an intermediary to deny DEA access to a particular Customer or to exclude a particular Customer from using the system for a certain time.

However, many markets have expressed concern that they do not have the authority and, therefore, lack of the ability to take disciplinary actions directly against non-members, e.g., the DEA Customers of members. The concern expressed was that even though market rules may provide that market-members are responsible for their Customers' trading through DEA, it may be difficult to prosecute an intermediary for the underlying violation of the market rules caused by the Customer. Instead, actions may be taken to sanction the market-member for a lack of supervision of trading. In fact, however, it may be difficult for a market authority to prove that the intermediary had inadequate policies and procedures in place. It should be noted, however, that in all SC2 and SC3 member countries, the relevant statutory regulator has jurisdiction over any person engaged in fraudulent trading practices on a market, whether a market-member or not.

Another factor that complicates enforcement of market rules in the DEA context is that most market electronic systems do not identify, in real time, the particular Customers of market-members who may have SA or AOR (i.e., the systems do not support sub-user identifiers or

passwords). Indeed, some markets permit the sub-delegation of a Customer's DEA access to another party.

In their responses to the consultation/survey, some intermediaries stressed the importance of trading risk and that the market authority will hold the intermediary responsible for the violation of any trading rules imposed by the market. One North American intermediary expressed particular concern about possible violations of SEC or other rules pertaining to trading conduct – for example, improper trading designed to manipulate the closing price. As the intermediary for such a trade, it will be held to account for any problematic trading activity performed by its Customer.

Most intermediaries enter into written contractual agreements with their DEA Customers, the purpose of which is to restrict, condition or otherwise control how those DEA Customers utilizing the intermediary's infrastructure to transmit orders, as well as to seek to ensure compliance by their DEA Customers with market rules. Some of the key terms and conditions contained in such contracts include the following:

- Provisions that address the respective rights and liabilities of the parties such as statements that the Customer accepts all liabilities resulting from DEA (including use of identification codes, settlement and delivery);

- Provisions relating to the security (physical and IT security) of the infrastructure (user identity, passwords, authentication codes, etc.), to avoid unauthorized system access;

- Limits that are expressed as a notional amount for each Customer above which the orders are rejected by the system, as well as by reference to the maximum amount per order/per user;

- Warranties, indemnities, charges and Customer/product specific conventions;

- Conditions (such as for entering orders, error trade policies, etc.) and restrictions such as the right to suspend the service, to reject or cancel orders, etc.;

- A requirement to have knowledge of trading rules and applicable laws and regulations or a requirement to comply with these; and

- A requirement that the Customer's personnel who manage the process are authorized, qualified and competent.

These terms and conditions are usually standard in terms of restrictions, conditions and controls although most intermediaries clarify that they are adapted to the business relationship with the Customer and the type of service provided (dealing services, clearing services, prime brokerage).

In addition, most intermediaries are required to have in place proper procedures and policies to monitor DEA Customers and their trading activities. However, even where intermediaries have in place appropriate procedures, in certain cases, market rule violations have occurred nonetheless.

B. Risk Management

Credit risk is a key risk management concern. It is generally described as the risk that an intermediary is normally financially responsible for the trades of a Customer. Some industry representatives at meetings sponsored by IOSCO in the research phase of this project emphasized that non-clearing market members presented essentially the same type of *credit risk* to a clearing firm as a DEA Customer of an intermediary.

As an example, one North American based firm indicated that compliance or regulatory risks are more pronounced when a DEA Customer that is not a market-member places orders directly on a market in the name of the intermediary, and that credit risks are more pronounced where the DEA Customer is not a clearing member of the market.

In most jurisdictions, primary responsibility for overall credit control and risk management, including with regard to DEA, is the responsibility of the market-member and the market member's clearing firm, and the clearance and settlement (C&S) entity,[10] but *not* the market. Although C&S entities do not assume *per se* the risk management obligations of intermediaries specifically with regard to DEA, they do play an important supporting role. The C&S entity will have systems in place to manage risk, including the imposition of trading and position limits, the setting of margin requirements, as well as collateral control and monitoring the financial health of its clearing members.[11]

Where there is automated order routing, i.e., where orders are sent through the intermediary's infrastructure, the intermediary has the opportunity and time to implement its risk management protocols, including pre-trade controls. However, even then, the speed of electronic execution narrows to milliseconds the available time for traditional risk management and error trade detection and response. In SA situations, i.e., where orders are transmitted to the exchange trade matching system outside the intermediaries' infrastructure, the ability of the responsible firm to conduct robust risk assessment, particularly on a pre-trade basis, is even more limited in the absence of risk management functionalities software engineered into the execution path to the markets. This magnifies the potential negative effects of a mistake (e.g. errant algorithm) or of a DEA Customer exceeding credit limits.

Although competition appears to be driving major markets to implement the risk management tools desired by intermediaries,[12] differences remain in the risk management functions made

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10 The term *clearance and settlement entity* refers in general to both a central counterparty, e.g., the National Securities Clearing Corporation located in the United States, and a central securities depository, e.g., the Depository Trust Company and Clearing Corporation, also headquartered in the United States.

11 In a previous report, IOSCO noted that a central counterparty has the potential to reduce significantly risks to market participants by imposing more robust risk controls on all participants and, in many cases, by achieving multilateral netting of trades. It also tends to enhance the liquidity of the markets it serves, because it tends to reduce risks to participants and, in many cases, because it facilitates anonymous trading. See http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf.

12 Eurex trading platform release 11.0 combines trading (order entry), risk management (risk exposure, including the ability to stop specific traders from continuing to trade) and post-trade clearing (margin, settlement netting) functionalities. See http://www.eurexchange.com/r11/functional_features_en.html. Among other things, Eurex permits members to trigger a "stop" action on individual trader IDs, which encompasses both individuals and algorithms that run under specific trader IDs. Triggering a *stop* action will make it impossible for the Trader ID to engage in any further trading activities and will

available by markets and C&S as part of their electronic trading systems. The regulatory issue is whether market authorities should specifically identify the type of controls (e.g., filters) that trading systems should make available for risk management purposes.

Some markets articulate high level principles setting out broad risk management expectations, and require market-members offering DEA to their Customers to implement procedures that are intended to achieve certain risk management objectives, but do not impose any detailed or specific parameters to achieve such objectives. By contrast, other markets set forth more detailed expectations. For example, they may enumerate a list of expected controls, such as monitoring capabilities and the ability to set credit control parameters (e.g., trade quantity limits, position limits, exposure limits, loss limits, and eligible products and instruments), and the ability to adjust control values and parameters in real time during a trading session.

Intermediaries appear to manage the risks posed by DEA using a three-pronged approach:

1. an analysis of the potential DEA Customer (e.g., history, creditworthiness, etc);

2. pre-execution risk controls; and

3. post-execution controls.

Each of these three mechanisms must work together to provide a comprehensive risk management program.

Of the three risk management tools available to the intermediary, the first - analysis of the Customer- is sometimes described by intermediaries as the most critical, since it is not possible to impose meaningful pre- and post-execution risk control measures unless the intermediary has a comprehensive understanding of the DEA Customer's risk profile.

All intermediaries who responded to an IOSCO survey reported monitoring trades on both a pre- and post-trade basis, but such monitoring took various forms. Moreover, some intermediaries that require their Customers to use the intermediaries' infrastructure indicated that one of the reasons for not permitting *sponsored access* was due to the inability of the intermediary under such circumstances to impose sufficient pre-execution risk controls.

Most intermediaries reported that pre-trade controls, at a minimum, included protection against orders placed in error, sometimes referred to as *fat finger* protections. Other common pre-execution controls included *abnormal activity* alerts, and filters that provide for a maximum order size. Some controls are designed to respond promptly to increasing risk presented by a DEA Customer's trading pattern. Others do so by setting trading limits on size of orders, credit or total margin exposure, or maximum order and total value of an order. The limits may restrict further order flow when breached.

A number of intermediaries stated that if a Customer reaches a trading position that is close to the total limit set for the Customer, they have the ability to reduce the frequency and/or size

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delete all open orders preventing any increase in risk of that trader ID. See http://www.eurexchange.com/r11/functionalfeatures/risk/stop_button_en.html.

of subsequent orders, in order to prevent subsequent Customer orders from going over the pre-set limit. Such tools may be particularly relevant with respect to Customers using automated algorithms to place orders on a market. In addition, intermediaries generally have the ability to press a *stop* or *panic* button, in order to prevent a DEA Customer from placing any further orders on the market.

Additional pre-trade execution controls appear to be coming into use. For example, some intermediaries reported that they now have the ability to see pending order flow placed by their DEA Customers, but not yet executed on the market. Still other intermediaries are developing the ability to delay orders in order to run a pre-execution filter, so that after a DEA Customer places the order, the intermediary's automated systems will have a period up to one second in which to reject the trade. However, one European respondent noted that it would not be possible to impose *systematic limits* on DEA Customers on orders if those transactions did not flow through the intermediary's infrastructure.

Pre-execution trading filters are common in AOR. In such cases, the intermediary has the ability to see the order flow and interact, i.e., it can stop an order before execution. However, in SA, the use of such filters appears to be less prevalent. A common theme through the responses was that DEA Customers would not accept any filter that imposed a delay in order execution. Intermediaries face pressure from DEA Customers, especially, high frequency traders, to be able to trade without pre-trade filters which may add latency. Acceptance of this practice would provide an incentive for intermediaries to eliminate what can be a valuable risk management and market integrity protection tool in order to accede to the demands of DEA Customers seeking a latency advantage, albeit in milliseconds.

On the other hand, some C&S and intermediary representatives argue that risk management should not be viewed in terms of a *one-size-fits-all* series of mechanical actions and that responsible risk management approaches can appropriately rely more heavily on robust *know your customer* inquiries and *post-trade* controls rather than on pre-trade filters. Some intermediaries and market representatives have noted that a mechanistic rejection of an order that exceeds a *hard* trading limit without knowledge of the Customer's entire trading strategy and positions in other instruments could inadvertently convert a winning trade into a losing position.

In effect, those arguing for a flexible risk management approach believe that responsible risk management decisions cannot be reduced to a formula, but must be the result of an active, case-by-case decision-making process that takes into consideration the distinct characteristics and sophistication of the DEA Customer. Under this approach, it is argued that an intermediary might rely more heavily on credit determinations and the sophistication and background of the Customer, along with past experience with the Customer, rather than on pre-trade controls that set hard limits on order quantities, and that therefore pre-trade controls might vary. For example, a pre-trade filter may be used to trigger a warning rather than impose a cap on orders.

Nonetheless, it should be recognized that technological advances have minimized the latency effects of pre-trade filters, a key risk management tool. Accordingly, this raises the issue of whether markets should make certain pre-trade filters and post-trade functions available as a matter of best practice in order to facilitate better risk management at the firm level.

All surveyed intermediaries confirmed that they monitor trades on a post-trade basis. One European firm reported applying an in-house developed risk management model over the aggregated position in addition to applying various limits such as credit risk, stress risk, concentration risk and long option premium limits. There was however, a varied approach in terms of applying post execution controls.

C. Adequacy of Information from the Market and/or Clearinghouse

The surveys undertaken by IOSCO highlight that intermediaries that permit Customers to use SA in order to execute transactions do not always receive information concerning pending orders on a pre-execution basis. As an example, one North American intermediary stated that "to the extent that Customer transactions [are] on a sponsored access basis, the Customer's orders are not visible to it before execution, other than through supervisory terminals made available by connectivity providers/service bureaus."

By contrast, other intermediaries emphasized their ability to obtain information on a near real-time pre-trade basis, sometimes referred to as *drop-copy*.[13] In theory, the order is not yet executed, but in practice there is generally no way to stop the order once the *drop copy* has been received.

Issues relating to post-trade data appear to be less acute than with respect to pre-trade information. Intermediaries generally reported that they are able to obtain information on a post-trade basis for their DEA Customers that is identical to, or substantially the same, as for clients trading on a non-DEA basis, i.e. full trading details (type, instrument, price, quantity, time, etc.). With very few exceptions, data is received immediately following the trade (once every 5 minutes at the latest, depending on the market). Speed of data appears to depend on the mode of access and electronic line/connectivity used by DEA Customers.

D. Algorithmic Trading and Co-location

The overwhelming majority of markets responding to an IOSCO survey question on capacity issues indicated that they had no concerns about capacity; however, a smaller number expressed capacity and system response concerns related to algorithmic trading. While algorithmic trading has the potential to enhance the quality of the market through increased trading interest and resulting price discovery, it also can potentially overwhelm system capacity and force delays in order display and execution through the queuing of messages.

The Consultation Report raised the issue of whether differences in latency arising from different means of connecting to trading systems and locating trading systems close to exchange servers (i.e., so-called *co-location*) raise any concerns that should be addressed by means other than disclosure and equitable access as provided for in *IOSCO's Principles for the Oversight of Screen-Based Trading Systems.*[14] In that report, we stated that *equality of*

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13 In general, this refers to the intermediary receiving a *copy* of its SA Customer's order as it is placed for execution.

14 *See Principles for the Oversight of Screen-Based Trading Systems*, Report of the Technical Committee of IOSCO, June 1990 (Screen-Based Principles Report); and *Principles for the Oversight of Screen-Based Trading Systems for Derivative Products-Review and Additions*, Report of the Technical Committee of IOSCO, October 2000, at p. 5, section III, Part 1, available at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD111.pdf.

treatment within a given connectivity option was most important and that *differences in response time should be addressed by disclosure.* Not all respondents addressed this issue and of those who did, the comments were split equally.

The comments indicating that they were content with the disclosure and equitable access approach generally viewed the issue in the context of providing Customers with access that is appropriate to each Customer's business model. Respondents whose latency concerns were not fully addressed by disclosure and equitable access generally emphasized the need for fair and equitable access to the market for all market participants and the elimination of competitive disadvantages. However, a common theme through the responses was that DEA Customers would not accept any filter that imposed a delay in order execution.[15]

The *fairness* of latency differences resulting from different technical connection options and in particular from co-locating high speed *algorithmic* trading systems adjacent to exchange servers raises significant technical and market integrity issues. At this time, in light of the limited public comments, the Technical Committee has determined not to develop any new policy on this issue. Pending further work on this issue, the Technical Committee suggests that market authorities take into account the approach set out in IOSCO's earlier paper relating to the *Principles for the Oversight of Screen-Based Trading Systems.*

The combination of DEA and algorithmic trading can, on rare occasions, pose threats to orderly trading. Markets should, as appropriate, adopt, and implement on an automated basis, measures to address such threats.

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15 Some intermediaries indicated that the filters had not slowed order execution. Another broker acknowledged that filters could slow the order process, and indicated that it was working on enhancements to its filtering tools so that it would not add to the *latency* period in order execution. Another firm indicated that where filters are implemented "appropriately," there is only a minimal latency period.

Chapter 5 Principles for Direct Electronic Access with Explanatory Text

A. Introduction

As a preliminary point, the Technical Committee notes that whether to allow the use of DEA is itself a regulatory question and that not all jurisdictions may believe that it is appropriate to do so. The Technical Committee expresses no opinion as to whether a jurisdiction should allow the use of DEA. This Final Report is intended as guidance for jurisdictions that do allow or are considering whether to allow DEA.

As indicated in this Final Report, markets and intermediaries that are market members should have appropriate policies and procedures in place that seek to ensure that DEA Customers will not pose undue risks to the market and the relevant intermediary, and regulators should take measures to ensure that such policies and procedures are in place. The increasing use of DEA has, however created, substantial challenges. For example, there is the potential, particularly if proper controls are not implemented, that a Customer may intentionally or unintentionally cause a market disruption or engage in improper trading strategies that may involve some elements of fraud (including manipulation), and/or that may expose the intermediary to excessive credit risk. Unauthorised access is also generally recognised as being a major concern in terms of market integrity and security.

In light of these facts, the Consultation Report contained eight principles applicable to DEA arrangements in three key areas:

(i) pre-conditions for DEA;
(ii) information flow; and
(iii) adequate systems and controls.

Some of the proposed principles were modified in response to comments raised by stakeholders and concerns raised by regulators. A feedback statement that summarizes the comments received and the responses of the Technical Committee is attached to this Report as Appendix 2.

This section of the Final Report sets forth the final principles and describes the central risks that each principle seeks to address.

B. Pre-Conditions for DEA

Principle 1: Minimum Customer Standards

Intermediaries should require DEA customers to meet minimum standards, including that:

- *Each such DEA customer has appropriate financial resources,*
- *Each such DEA customer has appropriate procedures in place to assure that all relevant persons:*
    - *are both familiar with, and comply with, the rules of the market and*

- *have knowledge of and proficiency in the use of the order entry system used by the DEA customer.*

Market authorities should have rules in place that require intermediaries to have such minimum customer standards.

This principle addresses the risks posed by allowing any user to access markets outside of the infrastructure and/or control of market intermediaries' traditional risk management approaches. In particular, allowing such access may make rule compliance and monitoring more difficult (e.g., regarding market manipulation and insider dealing.)

This principle is not intended to indicate whether a market authority should prescribe rules establishing minimum customer standards in the DEA area or, conversely, whether the primary responsibility for compliance should be with the intermediary and the markets, leaving the regulator in a supervisory role. The Technical Committee recognizes that each jurisdiction will determine its own mechanisms for determining minimum standards for Customers.

The principle does not imply that the intermediary must review each DEA customer's particular knowledge of the market rules and proficiency in the order entry system. However, the Technical Committee believes that firms should, as a matter of sound risk-management, take reasonable steps, such as requiring certain representations or warranties, as appropriate, during the customer vetting process, to confirm that the DEA customer is taking reasonable and appropriate steps to ensure that it has both sufficient knowledge of the market rules and technical proficiency in the trading system. Once again, the Technical Committee recognizes that it is the decision of each jurisdiction as to whether such steps should be left entirely to firms' individual determinations or whether regulators should take a more active role is establishing minimum steps for customer vetting.

Principle 2: Legally Binding Agreement

There should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided. Each market should consider whether it is appropriate to have a legally binding contract or other relationship between itself and the DEA customer.

The Technical Committee's inquiry into DEA revealed substantial variation in the procedures used by markets and intermediaries to authorize DEA and ensure the ability to sanction improper conduct. A fundamental concern raised by customers' use of DEA is the need to ensure that the intermediary's customer will comply with market rules. Although the intermediary remains ultimately liable for all market rule compliance (see below), as a practical matter, such compliance will be facilitated through legally binding requirements on a DEA customer.

In addition, concern had been expressed that, even though market rules may provide that market members are responsible for their customers trading through DEA, it may be difficult in some jurisdictions to prosecute an intermediary for the violation of the market rules caused by the customer. A contractual relationship between the market and DEA Customer is one of several ways to enable market authorities to enforce rules directly against the DEA Customer.

However, the Technical Committee believes that it should be left to individual jurisdictions to determine whether their regulators should establish requirements governing the legal relationships between markets, intermediaries, and DEA customers.

Principle 3: Intermediary's Responsibility for Trades

An intermediary retains ultimate responsibility for all orders under its authority, and for compliance of such orders with all regulatory requirements and market rules.

In those jurisdictions where a DEA customer is permitted to sub-delegate its direct access privileges to another party (a sub-delegatee), the intermediary continues to be ultimately responsible for all orders entered under its authority by the sub-delegatee and should require the sub-delegatee to meet minimum standards set for DEA customers in general. There should be a recorded, legally binding contract between the DEA customer and the sub-delegatee, the nature and detail of which should be appropriate to the nature of the service provided.

Principle 3 addresses the issue of ultimate responsibility for DEA arrangements, including where access rights by a DEA customer are *sub-delegated* to a third party. Of particular concern, in the absence of contractual or other measures, is that sub-delegation makes it difficult for the responsible intermediary to identify a sub-delegatee.

The principle emphasizes that an intermediary retains *ultimate responsibility* for all orders under its authority. The revised principle removes any implication that IOSCO is endorsing the practice of sub-delegation. However, should the intermediary choose to assume the risks associated with sub-delegation, and presuming that the practice is permitted by the intermediary's supervisory authority, the intermediary remains ultimately responsible for all orders entered into by the end user of a DEA customer's system and should employ some means to assure that the DEA customer knows all its sub-delegatees.

C. Information Flow

Principle 4: Customer Identification

Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance. In those jurisdictions where sub-delegation is permitted, the intermediary also has such responsibility to the market authorities with respect to any sub-delegatees.

A factor that complicates enforcement of market rules in the DEA context is that most markets' electronic systems do not identify the particular customers of market-members who may have SA or AOR (i.e., the systems do not support sub-user identifiers or passwords). This may delay the process of investigation if the market authority seeks information to identify the ultimate customer or user. Additional complicating factors include increased volume and the complexity of information caused by algorithmic trading.

The Technical Committee believes that the intermediary must know who is using its DEA facilities and have in place procedures for identifying any sub-delegates, if sub-delegation is permitted. The principle requires that means be employed by the intermediary to identify the client having sent any DEA order, at the market authority's request, to facilitate market

surveillance.[16] The Technical Committee believes that assigning each DEA customer a unique ID or mnemonic is not a novel concept. The use of unique IDs is related to two goals: identifying the person or system that entered an order and identifying the beneficial owner of that order. An ID unique to each DEA customer or sub-delegatee authorized to enter orders will identify that person or system and facilitate efforts to determine the beneficial owner of the order.

Principle 5: Pre- and Post-Trade Information

Markets should provide member firms with access to relevant pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls.

This principle reflects the Technical Committee's recognition that in the dispersed world of electronic trading, intermediaries must have timely access to relevant pre- and post-trade information in order to facilitate the performance of their traditional risk management functions in the context of DEA.[17]

D. Adequate Systems and Controls

Principle 6: Markets

A market should not permit DEA unless there are in place effective systems and controls reasonably designed to enable the management of risk with regard to fair and orderly trading including, in particular, automated pre-trade controls that enable intermediaries to implement appropriate trading limits.

Principle: 7: Intermediaries

Intermediaries (including, as appropriate, clearing firms) should use controls, including automated pre-trade controls, which can limit or prevent a DEA Customer from placing an order that exceeds a relevant intermediary's existing position or credit limits.

Whatever the maximum level of risk that a firm accepts may be, it must not be infinite. Neither the perceived sophistication of the firm, its risk management expertise nor its access to funding warrants exposing its clients and a clearing organization to unlimited risk. Accordingly, the Technical Committee concludes that firms must have the electronic controls to limit their risk exposure in order to protect customers and the clearing organization.

The Technical Committee believes that the specific type of pre-trade controls implemented by a firm or market that enable intermediaries to implement appropriate risk limits should be

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[16] The Technical Committee recognizes the importance of maintaining the confidentiality of certain information as well as the need to use such information consistent with a supervisory or regulatory purpose. Market authorities should implement the principle based on regulatory requirements and business practices applicable to their respective jurisdiction. *See also* the attached Feedback statement under Industry Feedback (Appendix 2 pages 8-9).

[17] Id.

a matter for determination by the market, market intermediaries, clearing firms, and market authorities. Intermediaries already make such determinations; and the Technical Committee is not taking a position as to the level of granularity with which market authorities should regulate those determinations. Nonetheless, with regard to the implementation of such pre-trade controls, it is the intermediary's (including a clearing firm's) responsibility to help ensure that the controls it is using are effective when implemented and on an ongoing basis.

The use of electronic controls to limit the level of risk that an intermediary accepts is particularly necessary in the context of high speed algorithmic trading. A firm default exposes all of its customers to loss, as well as the clearing organizations of which the firm is a member, and could have broader systemic effects. The suggestion that a customer's true position may include offsets of which the firm is unaware is insufficient to permit the customer to place unlimited positions.[18] The Technical Committee recognizes that these possible effects of a firm default raise significant regulatory issues.[19]

DEA also raises issues concerning the financial condition of the clearing firm. The Technical Committee believes that a clearing member has the same need to be able to control its exposure to the trades it clears for a market member as it does with respect to its own AOR or SA customers or those AOR or SA customers of another intermediary. The Principle clarifies, by including "as appropriate" in the parenthetical text relating to clearing firms, that where a separate entity is undertaking the clearing arrangement for a DEA intermediary, the clearing firm should require that automated pre-trade controls are in place to control the risks posed by the market intermediary. While the clearing firm is not directly responsible for managing the risk posed by individual DEA customers of the market intermediary, the clearing intermediary should manage the risks posed by the market intermediary's DEA customers as a group, as well as those risks posed by all direct DEA customers of the clearing firm, as the clearing intermediary is responsible for all trades it clears.

As discussed above, the Technical Committee believes that the specific type of pre-trade controls implemented by a firm or market that enable intermediaries to implement appropriate DEA risk limits, including the particular technology or structure by which such controls are achieved, should be a matter for determination by the market, market intermediaries, clearing firms, and market authorities.

As one example, a market could, with regulatory approval as necessary, provide and operate an automated system (i.e., software and hardware) that is used (i.e., by the setting of risk limits) by each of (a) the market intermediary, to limit the risks posed by its DEA customers individually and (b) the clearing firm, to limit the risks it clears, including those posed by

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18 The fact that the intermediary may be unaware of risk-reducing positions held by the customer implies that the intermediary may also be unaware of risk-enhancing positions. Moreover, in the event of the insolvency of the customer, gains from risk-reducing positions may not promptly be available to meet losses on positions held through the intermediary.

19 For example, some regulators take the position that an intermediary may not obscure risk management, meaning that the intermediary would not be able to rely on a third party to establish and administer risk parameters on behalf of the firm. This paper does not support the outsourcing of the intermediary's risk management responsibilities. In fact, by focusing on providing appropriate tools to the intermediary, some of which may be provided by the market, the above principles are intended to promote the implementation of appropriate risk management procedures in the DEA context.

market member DEA customers, by non-market-member DEA customers and by a market intermediary's DEA customers on an omnibus basis.

As a result of comments received on the Consultation Report, Principle 6 was modified to clarify that it applies to all three DEA pathways in order to complement principle 7, which essentially states that intermediaries, including clearing firms, should use both regulatory and financial controls to be used in connection with DEA trading. Controls to credit risk should limit or prevent a customer from placing an order that exceeds (or causes a non-clearing intermediary to exceed) existing position or credit limits. There is no convincing rationale for not using automated credit limit system filters, particularly when the failure to use such automated filters may expose market participants to unacceptable risks. In order to implement controls, it will be critical for intermediaries, third party vendors and markets to cooperate in putting into place appropriate systems and controls.

Principle 8: Adequacy of Systems

Intermediaries (including clearing firms) and markets should have adequate operational and technical capabilities to manage appropriately the risks posed by DEA.

Because of the impact systems failures have on public investors, intermediary exposure, and market efficiency, the Technical Committee believes that it is necessary for market authorities to take appropriate steps to obtain assurance that the automated systems of intermediaries and markets operate properly, and have the adequate capacity, scalable to volume,[20] to accommodate trading volume levels and to respond to emergency conditions that might threaten their proper operation. In particular, market authorities should require intermediaries and markets to establish comprehensive planning and assessment programs to test systems capacity and security and to ensure that they possess the appropriate technical expertise to maintain and operate these systems. The programs should include:

1) the establishment of capacity estimates for their automated order routing and execution, market information, and trade comparison systems;

2) periodically conducting capacity stress tests to determine the behavior of automated systems under a variety of simulated conditions;

3) seeking on a periodic basis the assessment of independent reviewers with regard to whether these systems are performing adequately and whether these systems have adequate security; and

4) implementation of policies for the hiring and training of qualified technical personnel.

[20] The term *scalable* refers to the ability of an intermediary or a market to increase efficiently capacity as volume increases.

Appendix 1 – Definitions used in the report

The following definitions and descriptive terms are used in this report[1]:

Automated Order Routing Through Intermediary's Infrastructure (AOR) describes an arrangement where an intermediary, who is a market-member, permits its Customers to transmit orders electronically to the intermediary's infrastructure (i.e., system architecture, which may include technical systems and/or connecting systems), where the order is in turn automatically transmitted for execution to a market under the intermediary's market-member ID (mnemonic).

DEA Customer – a person that is granted access to the market to transmit orders using *either* access through an intermediary's infrastructure, or access without utilization of the intermediary's infrastructure, whether or not that person is a licensed or registered intermediary.

Direct Electronic Access (DEA): DEA refers to the process by which a person transmits orders on their own (i.e., without any handling or re-entry by another person) directly into the market's trade matching system for execution.

Direct Access by Non-Intermediary Market-Members describes where a Person, who is not registered as an intermediary, such as a hedge fund or proprietary trading group, becomes a market-member, and in that capacity, in the same way as members that are registered intermediaries, connects directly to the market's trade matching system using its own infrastructure and member ID (mnemonic). Such non-registrant members must enter into clearing arrangements with and become Customers of a clearing member intermediary.

Market refers to exchanges and other trading facilities, for example, ATSs and MTFs.

Person: used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

Sponsored Access (SA) describes an arrangement where an intermediary, who is a market-member, may permit its Customers to use its member ID (mnemonic) to transmit orders for execution directly to the market without using the intermediary's infrastructure.

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[1] The definitions in this Final Report have been drawn from those used in the Consultation Report, however with an amendment to the "direct access by market members" pathway in light of comments received which indicated that registered intermediaries, in addition to non-registered intermediaries accessed markets through this DEA pathway.

Appendix 2

Feedback Statement on the Public Comments Received by the Technical Committee on the Consultation Report *Policies on Direct Electronic Access*

A. Introduction

The IOSCO Technical Committee published a Consultation Report on *Policies on Direct Electronic Access* (Consultation Report). The Consultation Report set forth elements regarding possible principles pertinent to direct electronic access and identified three key elements to be considered in the promulgation of guidance by IOSCO in the DEA area: pre-conditions for DEA, information flow, and adequate systems and controls. For each of these elements the Technical Committee identified possible principles that would provide guidance in the DEA area and invited comments on the possible principles and the Consultation Report from the industry and general public.

Non-confidential responses were submitted by the following organisations to the Technical Committee (TC):

Association Française de la Gestion financière (AFG)
Association française des marchés financiers (AMAFI)
Börse Frankfurt and Exchange Supervisory Authority of Hesse
Bundesverband Investment und Asset Management e.V. (BVI)
Bursa Malaysia
Credit Agricole Cheuvreux S.A.
DBS Vickers Securities (Singapore) Pte Ltd. (DBSV-iDirect)
Dutch Advisory Committee Securities Industry (DACSI)
Eurex Clearing AG
Financial Services Board of South Africa (FSB)
FIX Protocol Ltd.
Fortis Bank Nederland
Fortis Clearing Singapore Pte Ltd.
Futures Industry Association (FIA)
Goldman Sachs International
Investment Company Institute (ICI)
London Stock Exchange
Managed Funds Association (MFA)
Mizuho Securities Co. Limited
Multi Commodity Exchange of India (MCX)
National Futures Association (NFA)
Natixis Securities
Newedge Group
Nomura Securities Co. Ltd.
OCBC Securities Pte Ltd.
Ong First Tradition Pte. Ltd
Phillip Capital
Société Générale
UBS

UBS Futures Singapore Ltd. and UBS Securities Pte. Ltd.
UOB Bullion and Futures Limited

These responses can be viewed in Appendix 4 of this document.

The consultation process resulted in 33 responses from North American, Asian and European jurisdictions. Of these responses, 16 were from intermediaries, nine were from trade associations, five were from exchanges, and three were classified as "other," including a data vendor. The Technical Committee took these responses into consideration when preparing this final report.

This Feedback Statement is broken down into each principle proposed by the Consultation Report and includes the responses to each principle from the international financial community. It summarizes the respondent's comments, includes excerpts from responses to further illustrate the comments, provides the Technical Committee's responses to the comments, and describes any changes made as a result of the comments.

B. Pre-Conditions for DEA

(1) Minimum Customer Standards

Consultation Report Proposed Principle: Customers should be required to meet minimum standards, including:

- appropriate financial resources;
- familiarity with the rules of the market and ability to comply with the rules of the market;
- knowledge of the order entry system which the Customer is permitted to utilize; and
- proficiency in the use of that system.

Revised Principle: *Intermediaries should require DEA Customers to meet minimum standards, including that:*

- *Each such DEA customer has appropriate financial resources,*
- *Each such DEA customer has appropriate procedures in place to assure that all relevant persons:*
  - *are both familiar with, and comply with, the rules of the market and*
  - *have knowledge of and proficiency in the use of the order entry system used by the DEA Customer.*

Market authorities should have rules in place that require intermediaries to have such minimum customer standards.

Reasons for Revision to the Principle:

As set forth further below, this principle was revised in response to comments stating that it would be difficult for an intermediary to determine whether or not each DEA customer and any personnel of the DEA Customer have familiarity with market rules and proficiency in the order entry system used by that DEA Customer. As revised, the principle clarifies that the intermediary has the obligation to ensure that the DEA Customer has appropriate procedures in place to ensure compliance with market rules and the proficiency in the order-entry system, e.g., through representations and warranties, but does not mandate that the intermediary will necessarily audit DEA customer personnel compliance in this area.

Industry Feedback:

All but one of the comments responding to this proposed principle supported the general requirement that DEA Customers should be required to meet certain minimum customer standards, although nine comments qualified this agreement.

One Japanese firm, however, stated that it did not support the principle originally proposed in the consultative draft as it "is difficult to assess whether clients have sufficient technical knowledge and experience to handle their electronic trading systems. The way clients use their own trading systems is not information that is made public to brokers, and responsibility for knowing how to transmit orders electronically lies solely with the user." Similarly, an internationally active firm stated that it "does not agree that knowledge of the order entry system and proficiency with that system should be a minimum standard in all cases. The reasons for this are two-fold: first, [the firm] will not necessarily be familiar with the order entry system that the customer is using and therefore not qualified to meaningfully confirm proficiency; and secondly it is very difficult to evidence such proficiency on an equal and equivalent basis given the multitude and diversity of such order entry systems."

The reason most often stated for respondents' qualified support of minimum customer standards was the concern that rigid standard setting would leave the regulator, and not the intermediary, in charge of vetting customers. For example, one European exchange stated

> "that the criteria listed above are matters which we would expect member firms to take into account when deciding if it would be appropriate to provide a customer with DEA. . . . However, we believe that member firms will need to retain some level of discretion with respect to the detailed criteria they want to require of their customers." Similarly, a large US firm "agrees that DEA customers should be required to meet certain financial and competency standards and that IOSCO's proposed standards are reasonable . . . . However, we do not recommend that regulators impose specific minimum standards or dictate how Markets or intermediaries should apply such standards. This is because each entity may have different view as to what are the important qualifications for DEA customers based on their prior experience and assessment of risk."

As noted above, after reviewing the comments, the Technical Committee has revised the principle to clarify that there is no expectation that a regulator or market authority will

necessarily prescribe rules relating to minimum customer standards in the DEA area. As revised, the principle places the primary responsibility for compliance with the intermediary and the markets, and leaves the regulator in a supervisory role.

The principle does not state that the intermediary is to review each DEA customer's particular knowledge of the market rules and proficiency in the order entry system. However, the Technical Committee believes that firms should, as a matter of sound risk-management, take reasonable steps, such as requiring certain representations or warranties, as appropriate, during the customer vetting process to confirm that the DEA Customer is taking reasonable and appropriate steps to ensure that each DEA Customer has sufficient knowledge of the market rules and technical proficiency in the trading system.

(2) Legally Binding Agreement

Consultation Document Proposed Principle: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

Revised Principle: *There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided. Each market should consider whether it is appropriate to have a legally binding contract or other relationship between itself and the DEA Customer.*

Reasons for Revision to the Principle:

A number of comments expressed the view that a direct relationship between the market and each DEA Customer would facilitate compliance with the requirements imposed by the market. However, as discussed below, other comments opposed mandating such a relationship. Accordingly, the Technical Committee suggests that markets consider the appropriateness of entering into such relationships, but is not mandating a binding contract or other documentation between the market and DEA customers.

Industry Feedback:

All but one of the comments responding to this principle agreed that a legally binding contract should exist between the intermediary and the DEA Customer. The comments noted the following benefits of a contract:

- Emphasizes the need for customers to demonstrate their ability to monitor flows through adequate systems and organizations (European Bank);

- Adds comfort that the end user has demonstrated the requisite knowledge and agrees to be bound by the rules of the relevant exchange. This also provides "comfort that such an agreement can be produced in mitigation in circumstances where the regulator alleges market misconduct by the end user of the DEA system (European Bank);

- Serves to protect both parties (European Exchange);

- Allows firms to tailor contract appropriate to the nature of the service provided (Asian Bank).

Many respondents agreed with the suggested criteria set out in the consultative report, but maintained that the content of any contract should be defined by the intermediary. Two of the comments, while generally in agreement with the principle, stated that they were concerned that a particular form of contract would be required by the principle. Several respondents suggested that IOSCO develop a standardized document containing a core of relevant DEA provisions that could be tailored or amended to reflect specific exchange systems.

The Technical Committee notes that the principle, while stating that there should be a binding contract, does not prescribe the specific form or content of any contract. Instead, the principle requires that the nature and detail of the contract be appropriate to the nature of the services provided. The approach taken is consistent with the views of respondents who generally agreed that this allows the intermediary to tailor the contract to the needs of the type of DEA service provided. Moreover, as U.S. trade association noted, the specific content of such a contract should not be mandated in order "to ensure the intermediaries have flexibility to address evolving markets and changes in the circumstances surrounding client relationships."

Those that agreed that a contract should exist between the intermediary and DEA Customer agreed however that the elements listed in Chapter 5 Section B (2) of the Report are appropriate possible topics for such a contract.

The comments were split over whether SA Customers should enter into a contractual or other relationship with the market. A majority opposed requiring SA Customers to enter into a contractual relationship with the market, generally stating that the intermediaries, and not the market, are responsible for SA Customers. A European clearing organization reflected this position: "The management of the relationship between the intermediary and DEA customer falls under the responsibility of the intermediary. The market has to secure the proper legal relationship and responsibilities with the intermediary directly." A European exchange stated that "it did not think that it was necessary or appropriate for DEA customers to enter into a contract with the market," provided that the exchange's rules ensure that the member firm is responsible for all orders submitted under its trading codes." This exchange further noted that "retaining a straightforward exchange-to-member, bilateral relationship ensures clarity of who is responsible for what." This comment could be interpreted as suggesting that requiring a separate customer–market contract could undermine the concept that it is the exchange member bears ultimate responsibility for a transaction.

A surveillance unit of a European exchange provided a dissenting view, stating that it favors "a relationship between the DEA customer and the respective market based on direct legal provisions (law)" in order to ensure an efficient enforcement of exchange rules. This respondent was concerned that the principle would "not be able to tackle relationships based on multiple chains of DEA clients" and that the principle effectively would allow an intermediary "to contract out liability."

Several respondents interpreted the suggestion to require a contract or other relationship between the DEA customer and the market as requiring a tripartite contract. These comments generally pointed to the perceived difficulties of obtaining such a contract (i.e., that any attempt to configure a tri-partite contract between the customer, intermediary, and market would be neither desirable nor feasible.) Cross-jurisdictional issues were also raised should the end DEA customer be domiciled in a country other than that of the relevant market.

However, the consultative report did not suggest that a tripartite contract would be necessary. Any such relationship between the customer and the market could either be a tripartite contract or an independent relationship, separate from the contract between the customer and the intermediary. As for perceived difficulties and cross-jurisdictional issues, any such issues would be no more complex than the issues surrounding the provision of DEA between the market and a member in another jurisdiction. Moreover, there are supervisory advantages to have a contract or other direct relationship between the DEA customer and the market. A European firm noted the benefits of having such an arrangement:

> "SA DEA customers should be required to enter into a contractual relationship with each Market as well because this would enable each Market to receive direct representation for each DEA customer that it understands the Market's rules. In addition, this enables each market to more easily identify each SA DEA customer (which will augment its own market surveillance) and would alleviate the burden on each intermediary to have to provide this information itself, as well."

The Technical Committee generally agrees that the regulatory community should not dictate the relationships between markets, intermediaries, and DEA Customers. The goal is to ensure that some responsible party is held liable for a DEA Customer's conduct on the market. A contractual or other direct relationship (*e.g.*, membership) between the market and DEA Customers is one of several ways to accomplish this goal. Markets could also, for example, hold intermediaries strictly liable for the conduct of their DEA Customers, thereby forcing intermediaries to indemnify all DEA system end-users. If a given market desires imposing a requirement that DEA Customers enter into a contractual or other relationship with that market, it is free to do so, and these principles do not prevent such a contract. However, the principle, as drafted, does not necessarily mandate that a market enter into a contract with DEA Customers, but it suggests that the market consider the appropriateness of doing so in certain circumstances.

(3) Intermediary's Responsibility for Trades under its Authority

Consultation Report Proposed Principle: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

Revised Principle: *An intermediary retains ultimate responsibility for all orders under its authority, and for compliance of such orders with all regulatory requirements and market rules.*

In those jurisdictions where a DEA Customer is permitted to sub-delegate its direct access privileges to another party (sub-delegatee[1]), the intermediary continues to be ultimately responsible for all orders entered under its authority by the sub-delegatee and should require the sub-delegatee to meet minimum standards set for DEA Customers in general. There should be a recorded, legally binding contract between the DEA Customer and the sub-delegatee, the nature and detail of which should be appropriate to the nature of the service provided.

Reasons for Revision to the Principle:

In response to concerns raised by industry comments, as well as regulators concerns expressed at IOSCO meetings regarding whether the DEA Customer should even be permitted to sub-delegate its trading privileges to third party customers, the principle has been modified to remove any implication that IOSCO is condoning the practice of such sub-delegation. In particular, the principle now emphasizes that an intermediary retains "ultimate responsibility" with respect to any sub-delegation.

Industry feedback:

The comments indicate that sub-delegation is a fairly common practice. Nonetheless, many firms stated that they don't permit sub-delegation or expressed concerns about this practice. For example, one European entity stated that "[a]s a general principle, we don't agree that a DEA customer may sub-delegate its direct access privileges directly to another party, as we think that from a systemic perspective it increases risks." Similarly, another European firm stated that permitting a DEA customer to authorize others to trade on its behalf should not be permitted, "as the intermediary would have no control over the flow, and consequently [would be] unable to manage the exposure arising out of the sub-delegation." A major international firm stated that while it does not allow sub-delegation, its customers may have arrangements in place to receive orders electronically from their underlying customers, which they may validate and then, route on to the firm for execution.

Other firms, however, stated that authorized trading arrangements could be acceptable where certain conditions are met. For example, a US trade association stated that "where the DEA Customer is permitted to delegate its access privileges directly to another party, the DEA Customer should adhere to pre-conditions for DEA as would be done between the DEA Customer and Intermediary." A European trade association, while expressing some reservations about the concept of a DEA customer authorizing others to trade on their account, stated that "it should be at least necessary that the responsible intermediary's contractual arrangements with its DEA customer allow it to identify the Sub-Delegatee if required by a market authority." The Technical Committee felt that this point was sufficiently important to include within the principle itself.

The Technical Committee agrees that there may be more than one alternative procedure sufficient to ensure that Sub-Delegatees comply with market rules As revised and as previously discussed above, the principle takes the comments into account and emphasizes that sub-delegation - if permitted - is an option and a risk that may -- or may not -- be assumed by the intermediary.

Should the intermediary choose to assume this risk, it is ultimately responsible for all orders entered into by the end user of a DEA Customer's system and should employ some means to assure that the DEA Customer knows all its Sub-Delegatees. Any financial issues or legal violations vis-a-vis the market, for example that arise from use of the DEA system are the ultimate responsibility of the intermediary. This is without prejudice to the agreement between the intermediary and the DEA customer, which governs the relationship between those parties.

C. Information Flow

(1) Customer Identification

Consultation Report Proposed Principle: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

Revised Principle: *Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance. In those jurisdictions where sub-delegation is permitted, the intermediary also has such responsibility to the market authorities with respect to any sub-delegatees.*

Reasons for Revision to the Principle:

In order to enhance readability and clarity, the revised draft collects in one principle both customer identification requirements (which previously had been addressed in two principles, B(3) and C(1)).

Industry Feedback:

The majority of comments supported the principle that intermediaries should disclose customer information upon request from the market authorities. The Technical Committee concludes that the intermediary must know who is using its DEA facilities and have in place procedure for identifying any Sub-Delegatees if sub-delegation is permitted.

However, several respondents, in particular those representing the buy-side, raised confidentiality concerns. One US firm suggested that "DEA regulations contain meaningful and enforceable confidentiality safeguards applicable to both intermediaries and any other recipients of the data (e.g., exchanges). These safeguards should, at a minimum, require the recipients of the information to maintain the confidentiality of the information and to use it exclusively for regulatory purposes."

Another respondent was concerned that the scope and details of the principle were unclear and therefore stressed that the disclosure of customer information "must be limited to information that is relevant to specific risk concerns created by the particular DEA arrangement."

The Technical Committee agrees with the comments and in particular recognizes the importance of maintaining the confidentiality of certain information as well as the need to use such information consistent with a supervisory or regulatory purpose. The Technical Committee notes that the principle is not prescriptive and focuses on the information being provided to facilitate market surveillance (e.g., to address insider trading and market manipulation). Market authorities should implement the principles based on regulatory requirements and business practices applicable to their respective jurisdiction.

Nine comments supported assigning all DEA Customers their own ID or mnemonic, while two responses support it only for SA Customers. A European firm "agrees that it would be useful to assign a unique customer ID or mnemonic for each DEA customer; however, if this requirement is adopted, identifiers must be easy to maintain and implement technologically. Markets should work with intermediaries and vendors that provide DEA software to ensure that such identification system is simple and standardized across all exchanges." Moreover, this respondent noted that "the market does not always facilitate the correct identification of users by making it simple to pass on an electronic identifier (e.g., FIX Tag 50 sender sub id)."

A U.S. trade association stated that "assigning each DEA customer its own customer ID or mnemonic would not necessarily clarify identity. In the case of an Omnibus Customer the ultimate owner of a position is not information available to the FCM. Similarly a "black box" trader that is a DEA Customer may use different algorithms for specific customers, and may change that use at any time. It is not technologically feasible for an FCM to monitor which customers of a DEA customer are included in the omnibus account without asking the DEA customer, or which algorithm is used for what customer of the DEA Customer. In both cases we suggest that the FCM provide a DEA customer contact to the regulator and facilitate direct communication between them." Consistent with the latter comment, an Asian exchange noted that in the case of omnibus accounts, the exchange may require client detail from the intermediary.

While these comments raise useful information regarding the possible limitations on the use of unique customer IDs, it does not mean that such unique identifiers are not desirable, or feasible in most situations. Use of unique IDs is related to two goals: Identifying the person or system which entered an order, and identifying the beneficial owner of that order. An ID unique to each DEA customer or Sub-Delegatee authorized to enter orders will identify that person or system and will facilitate efforts to determine the beneficial owner of the order.

A European trade association, stated, however, that the intermediary can easily provide the market authority with the identity of the DEA customer (sub-customer); "this does not imply any specific technical requirement."

While respondents generally agree that providing DEA customers their own ID is desirable, and most agree with the proposed principle, some specifically stated that the

identifier should not be disclosed on an order by order basis. One internationally active firm, for example, stated that it "rejects the suggestion that such customer identification should be done on an order by order basis by use of customer IDs or mnemonics. This would not only be extremely difficult and costly to implement into an existing infrastructure, but [the firm] is not convinced that it will serve a meaningful purposes for market surveillance. . [The firm] does not believe that such a change would justify the cost and complexity of implementation to the intermediary. In addition, regulators may need to consider how their local regulations relating to confidentiality and anonymity interact with the idea that intermediaries should disclose (to a market in another jurisdiction) the identity of one of their DEA Customers."

One respondent noted that "for DEA access … the customer will connect to the exchange via a single id provided by the member or intermediary, but may provide access through that id via their own electronic trading systems to their own underlying users. In such circumstances, the identity of these underlying users will not necessarily be known or disclosed to the firm." This respondent emphasized the importance that the contractual documentation between the firm and the customer contain a provision "which requires the customer to disclose the identities of underlying users where specifically requested by an exchange, acting in its regulatory capacity, or from a regulator." This comment highlights that the proposed principles, such as the need for a legally binding contract and sub-delegation are complementary.

The Technical Committee believes that assigning DEA Customers their own ID or mnemonic is not a novel concept. Markets have means of identifying firms and firms have means of identifying clients and the orders they have made. The principle requires that these means be employed by the intermediary to identify the client, at the market's authorities' request, to facilitate market surveillance. There is no need to modify the principle.

(2) Pre and Post-Trade Information

Consultation Report Proposed Principle: Markets should provide member firms with access to all pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Revised Principle: *Markets should provide member firms with access to relevant pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls.*

Reasons for Revision to the Principle:

This principle was revised in order to clarify the scope of pre-and post-trade information that should be provided by markets to member firms.

Industry Feedback:

The comments overwhelmingly supported a principle whereby intermediaries received the information necessary to implement appropriate monitoring and risk management controls, though five comments raised the confidentiality concerns that have been addressed above in section C. (1) above.

The respondents believe that markets should provide intermediaries access to real time pre- and post-trade information, though concerns were raised about the implementation of this principle. For example, a European firm stated that "[p]roviding intermediaries with pre and post-trade information, even on real-time basis, will not prove sufficient to implement appropriate monitoring: should intermediaries remain responsible for monitoring and controls over SA, they would need markets to also provide them with adequate systems to make sure that orders get properly filtered. At the moment, the conditions for such filtering are clearly not met." Similarly, an Asian firm stated that the "exchange/market should provide market-members and DEA customers a program/website for real time access to view/cancel/amend orders. Sufficient audit trail should be provided to the market-members and DEA customers as well."

It is the Technical Committee's view that this principle applies solely to information that should be provided by the market to member firms. As such, issues relating to filters are discussed below, in Section D, as is the issue of *real time* access that would permit an intermediary to cancel or amend the order of a DEA Customer.

D. Adequate Systems and Controls

(1) Markets

Consultation Report Proposed Principle – Markets: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Revised Principle—Markets: *A market should not permit DEA unless there are in place effective systems and controls reasonably designed to enable the management of risk with regard to fair and orderly trading including, in particular, automated pre-trade controls that enable intermediaries to implement appropriate trading limits.*

Reasons for Revision to the Principle:

This principle, which as proposed had referred only to SA and AORs, has been revised to refer more broadly to all three types of *DEA* as such term is defined for purposes of this report, specifically: *intermediated DEA* (i.e., AORs and sponsored access), as well as *non-intermediated* DEA (i.e., direct access by non-registered/non-intermediary market members) in line with the scope of the report. As noted in the consultation report, although direct access by non-registrant market members may not always raise the same issues when compared with SA and AOR, credit risk is a key concern for all intermediaries, whatever the way orders reach the trading platform. In addition, the principle has been revised to clarify that the market should not only have rules in place but also be satisfied that effective systems and controls are in place.

Industry Feedback:

The proposed Principle attracted broad support from respondents.

The principle however has been changed to recognize that where a market chooses to offer DEA, it should ensure that the necessary tools to control the order flow are in place. Where intermediaries can implement such tools on their own, exchange rules may be sufficient.

The principle has also been extended to cover all three DEA pathways in order to complement the next principle, upon which the majority of respondents agree, that intermediaries, *including clearing firms,* should have in place both regulatory and financial controls. The responses received on the similarity and differences in the credit risk posed by AOR, SA and non registered intermediaries to the clearing firm are discussed under Proposed D3.

(2) Intermediaries

Consultative Document Proposed Principle—Intermediaries: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

Revised Principle—Intermediaries: *Intermediaries (including, as appropriate, clearing firms) should use controls, including automated pre-trade controls, which can limit or prevent a DEA Customer from placing an order that exceeds a relevant intermediary's existing position or credit limits.*

Reasons for Revision to the Principle:

Principle D.1. (Markets) now includes a clear statement that the market should not permit DEA unless there are in place effective systems and controls designed to enable the management of risk with regard to fair and orderly trading. Accordingly, a corresponding change was made to Principle D.2 (Intermediaries), applying to intermediaries, to clarify that it is the intermediary's responsibility to use such tools.

Industry Feedback:

Feasibility of imposing filters

A substantial majority of comments expressed the view that pre-trade controls are both desirable and feasible. In general, the respondents suggested the use of so-called "fat finger" limits, price control limits, position limits, credit limits and maximum daily long and short as pre-trade controls. The comments generally did not consider post-trade controls to be a replacement for pre-trade controls. A European trade association "believes that post trade controls are not sufficient to manage risks involved in DEA transactions. We understand the needs of some markets participants to have the fastest execution possible but this must not be done at the expense of the market integrity and in a way that increases the market risk taken by the intermediary which provides DEA arrangements."

Disagreeing that pre-trade controls are desirable and feasible, an internationally active firm states "that it is not possible to be aware of a customer's true position, given that many customers trade positions intra-day and have multiple clearing and /or custodial relationships… intermediaries should be allowed flexibility and diversity when accessing a customer's financial risk given that customers have multiple clearing and custodial relationships." A European firm similarly states that "from a technological perspective, it is not feasible to have an accurate picture of the DEA client's overall credit exposure based on trading that takes place through one particular trading system or market. The client will have positions in other markets and on other platforms that could either mitigate or aggravate the positions accumulated on [a] particular platform or market." Similarly, a European exchange states that in "terms of detailed controls, we do not consider it appropriate to be prescriptive given the broad spectrum of activity and trading volumes that different member firms and their customers generate. We view it as the responsibility of member firms to establish their own controls, taking into account the nature of their order flow, rather than relying on an exchange putting in place 'one-size-fits-all' controls."

The Technical Committee agrees that the specific type of pre-trade controls implemented by a firm or market that enable intermediaries to implement appropriate risk limits should be a matter for determination by the market, market intermediaries, clearing firms, and market authorities.

However, the Technical Committee notes that there is always some maximum level of risk that an intermediary may accept from a customer. Intermediaries already make such determinations and the Technical Committee is not suggesting that regulators should micromanage those determinations. The principles propose that whatever those determinations may be, they should be automated and implemented in a robust manner.

The use of electronic controls to limit the level of risk that an intermediary accepts is particularly necessary in the context of high speed algorithmic trading. A firm default exposes all of its customers to loss, as well as the clearing organizations of which the firm is a member, and could have broader systemic effects. The suggestion that a customer's true position may include offsets of which the firm is unaware is insufficient to permitting the customer to place unlimited positions.[2] Whatever the maximum level of risk that a firm accepts may be, it must not be infinite. Neither the perceived sophistication of the firm, its risk management expertise nor its access to funding warrants exposing its clients and a clearing organization to unlimited risk.

Accordingly, the Technical Committee concludes that firms must have the electronic controls to limit their risk exposure in order to protect customers and the clearing organization.

In reviewing the principles further, some regulators expressed a concern with respect to the applicability of the principles to clearing firms. These regulators noted that a clearing firm does not generally have a direct relationship with the DEA Customer of an intermediary which uses another firm to clear its trades. Rather, the executing broker has an omnibus account with the clearing firm, and the clearing firm sets overall limits on the omnibus account of the executing broker, but does not generally review the executing broker's limits that such an intermediary imposes on its own DEA customers. The revisions clarify that the clearing firm is not expected to impose controls on DEA trading with respect to an executing broker's individual customer positions and credit limits imposed by the intermediary on its individual customers, but will use controls in the DEA context to limit the clearing firm's exposure to the executing broker's omnibus account held by the clearing firm.

Utilization of filters by the Intermediary and the Market

The respondents that directly responded to the question of where pre-trade filters should be imposed were mixed, with the majority stating that pre-trade filters should be imposed at both the intermediary and market level.

Six respondents believe that the intermediary should impose pre-trade controls for all DEA transactions. An Asian firm echoed the sentiments found in several of the comments: "The best scenario is pre-trade controls to be provided at both levels. However, this will not be really appropriate as the risk should be managed by the company itself and not the market. The reasons being the strategic action is implemented by the senior management of the company of how the company should go

in the near future and the purchase of equipments, hiring of manpower and trading systems are all determined by the company as a whole. As such, it may look unfair for the market to also take in the role of the pre-trade control."

Six respondents believe that the market should impose pre-trade controls for all DEA transactions, while three respondents believe that the market should only impose the controls for SA transactions. A European trade association stated that "As far as possible, pre-trade controls should be at the market level rather than at intermediary level. The market [has] a better vision of all the players, and in addition it is not conflicts by interest (contrary to intermediaries, which might be tainted by frauds such as front-running/trading ahead of customer orders)."

The majority of respondents believe that pre-trade filters should be imposed both at the intermediary and the market level for all DEA transactions, while two respondents believe that both should impose controls only for SA transactions. Several comments addressed how this responsibility should be shared. For example, an Asian firm stated that both "licensed brokers and the exchange should validate orders. Considering the impact an erroneous trade may have on the market, we think the general validation should be at the exchange level, in case the broker is facing technical issues on their side." A European firm noted that "the responsibilities in case of error must be clearly defined. The market may not take on more responsibility for DEA than other orders."

In addition to the direct responses noted above, a large group of comments broadly considered the use and implementation of pre-trade filters and implicitly supported the idea that implementation should be at both the market and intermediary level. Those comments addressed implementation in terms of the responsibilities of both the market and the intermediary. For example, a European exchange distinguished between regulatory and financial controls, stating that "[r]egulatory rules should be directly applicable to the individual DEA customer and DEA customers should be sanctioned by their respective markets. Financial controls . . . , such as position limits should be monitored and controlled by a third party (this is not necessarily an intermediary) such as a clearing firm. A clearing house must be aware of each individual DEA client (irrespective of multiple order chains, thus beneficial owner, order generator) to tackle default risk." Several comments emphasized that intermediaries should determine the form of the pre-trade controls. Another European exchange stated that "member firms are best placed to determine the precise detail of the pre-trade controls that they wish to have in place for their DEA customers' order flow." Further, a US firm "believes that it is not always feasible for an intermediary to enforce the implementation of such filters. [The firm] does not believe that markets should require an intermediary to require such filters of these types for DEA clients without providing intermediaries the tools to access and enforce such filters."

The Technical Committee believes that pre-trade controls that limit or prevent a Customer from placing an order that exceeds existing position or credit limits should be used in connection with DEA trading. In order to implement controls, it will be critical for intermediaries, third party vendors and markets to cooperate in putting into place appropriate systems and controls, as filters will generally require that tools be present at both the market and firm level to achieve effective implementation, particularly with respect to the use of SA, where the end-user enters the order without using the front-end system of the intermediary.

(3) Adequacy of Systems

Consultative Document Proposed Principle: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Revised Principle: *Intermediaries (including clearing firms) should have adequate operational and technical capabilities to manage appropriately the risks posed by DEA.*

Reasons for Revision to the Principle:

The revisions of this principle reflect the necessity of taking appropriate steps to obtain assurance that the automated systems of intermediaries and markets operate properly, and have the adequate capacity, scalable volume, to accommodate trading volume levels and to respond to emergency conditions that might threaten their proper operation.

The majority of the comments stated that DEA systems and control procedures, including pre-trade controls and post-trade controls, should be similar or equivalent to those presently applied to non-DEA business. A European exchange states that "clearly all orders submitted to the market should be subject to broadly similar controls. Controls are essential to the orderly functioning of the market and should be required for both DEA and non-DEA business. While trading venues may not need to be prescriptive about the specific controls that are necessary, we would expect controls between DEA and non-DEA firms to be broadly equivalent as we view all activity under a member firm's trading codes as being that firm's responsibility." In contrast, an Asian firm did "not agree that the controls should be present for non-DEA business as systems are computerized which works differently as compared to manual checking. We would also like to state that there may be potentially many different factors that we need to analyze between the two, due to the differing client profiles and of course risk profiles, for us to generalize the practicality of utilizing the same set of rules and components for both DEA and non-DEA will result in an inefficient trading environment."

The question as to whether a non-clearing market member is less of a credit risk because they are a market member attracted numerous responses. The comments generally stated that simply being a market member does not decrease credit risk. Other responses stated that whether or not a non-clearing market member is less of a credit risk depended on the market.

A number of Asian firms, for example, emphasized the credit risk that a clearing firm incurs when a market member takes a position on the market. An Asian entity stated that "[w]e do not agree that the mere fact that the customer is a market-member will reduce the credit risk." Another Asian respondent stated that "[w]e do not expect credit risk to decrease [because one is a market member]." A European exchange stated that "we would not expect clearing firms to rely on membership as the sole criterion for providing credit. The fact that the customer is a market member does not necessarily reduce risks to the clearing member,."

In contrast to these majority views, a few respondents provided a different answer. For example, one firm stated that "…DEA does not raise specific issues concerning the clearing of transactions. The clearers have the same responsibilities and face the same risks in all situations whenever the trading firm is registered or not and whenever the trading firm offers DEA to its customer or not….Therefore [we] suggest that the Technical Committee reconsider the report by defining DEA only in the case of [automated order routing systems and sponsored access] and by focusing on the relationship between the trading member and its customers." A European trade association and a major European firm recognized the similarity of credit risk regardless of the status of the intermediary's or clearing firm's client: stating that "[t]he clearing firm which has the possibility to accept or not a trading firm, faces the same credit risk whether the trading firm is registered or not."

The Technical Committee agrees that DEA raises issues concerning the financial integrity of the clearing firm. The clearing member that clears trades for a market member has the same need to be able to control its exposure to that trader as to control its exposure to the trades that it clears for its own AOR or SA Customers or for the AOR or SA customers of another intermediary. This is why the principle discussed in section D (1) above has been broadened to refer generically to "DEA." [3]

As to whether intermediaries who receive "drop copies" of SA Customer's orders are able to stop the order, the comments were split. Five responses believe that drop copies can be utilized to put a stop to a SA Customer's order, four comments disagreed, and two comments believed the utility of "drop copies" depended on the order and/or the exchange. In any case, there is a consensus among the respondents that "drop copies" are useful. For example, an internationally active firm "notes that in theory if you have the necessary systems and configurations to receive 'drop copies' these could be used to withdraw any resting orders that had not been executed. Notwithstanding the above it should also be noted that 'drop copies' have other uses and may also be necessary for straight-through-processing and for customers to perform their own internal risk management." Also, a French trade association states that "[r]egarding 'drop copies' dropped by SA customers to their intermediaries, we think that these copies represent useful information for the relevant intermediaries even if the orders could not be stopped prior to execution."

Finally, with respect to the issue of latency and fairness, the consultative report raised the issue of whether differences in latency arising from different means of connecting to trading systems and locating trading systems close to exchange servers (i.e. so-called *co-location*) raise any concerns that should be addressed by means other than disclosure and equitable access as provided for in the 1990 Screen-Based Trading Principles. Not all comments addressed this issue and of those who did, the comments were split equally on this issue.

The comments indicating that they were content with the disclosure and equitable access approach generally viewed the issue in the context of providing customers with access that is appropriate to each customer's business model. The comments whose latency concerns were not fully addressed by disclosure and equitable access generally

emphasized the need for fair and equitable access to the market for all market participants and the elimination of competitive disadvantages. A US trade association stated that "SA and Direct Access Customers are high-speed, high-volume traders. For these market participants, including many hedge funds, their primary objective is to provide their investors, to whom they have a fiduciary duty, with the highest quality execution possible at the least cost. In this respect, Customers are critically concerned with latency as delays can result in poor trade execution quality, increased costs to investors, as well as make it harder for the Customer to achieve its investment objectives. We believe it is possible to reduce latency while enhancing regulatory compliance and oversight, and that the two objectives are not mutually exclusive. We believe latency should be addressed from both a regulatory and technical perspective. We submit that any regulatory requirements or guidelines concerning DEA should avoid creating competitive disadvantages."

The *fairness* of latency differences resulting from different technical connection options and in particular from co-locating high speed *algorithmic* trading systems adjacent to exchange servers raises greater technical and market integrity issues that were beyond the scope of the current consultation report.

Appendix III

Principles for Direct Electronic Access

Pre-Conditions for DEA

(1) Minimum Customer Standards

Intermediaries should require DEA customers to meet minimum standards, including that:

- Each such DEA customer has appropriate financial resources,
- Each such DEA customer has appropriate procedures in place to assure that all relevant persons:
    - are both familiar with, and comply with, the rules of the market and
    - have knowledge of and proficiency in the use of the order entry system used by the DEA customer.

Market authorities should have rules in place that require intermediaries to have such minimum customer standards.

(2) Legally Binding Agreement

There should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided. Each market should consider whether it is appropriate to have a legally binding contract or other relationship between itself and the DEA customer.

(3) Intermediary's Responsibility for Trades

An intermediary retains ultimate responsibility for all orders under its authority, and for compliance of such orders with all regulatory requirements and market rules.

In those jurisdictions where a DEA customer is permitted to sub-delegate its direct access privileges to another party (a "sub-delegatee"), the intermediary continues to be ultimately responsible for all orders entered under its authority by the sub-delegatee and should require the sub-delegatee to meet minimum standards set for DEA customers in general. There should be a recorded, legally binding contract between the DEA customer and the sub-delegatee, the nature and detail of which should be appropriate to the nature of the service provided.

Information Flow

(4) Customer Identification

Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance. In those jurisdictions where sub-delegation is permitted, the intermediary also has such responsibility to the market authorities with respect to any sub-delegatees.

(5) Pre and Post-Trade Information

Markets should provide member firms with access to relevant pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Adequate Systems and Controls

(6) Markets

A market should not permit DEA unless there are in place effective systems and controls reasonably designed to enable the management of risk with regard to fair and orderly trading including, in particular, automated pre-trade controls that enable intermediaries to implement appropriate trading limits.

(7) Intermediaries

Intermediaries (including, as appropriate, clearing firms) should use controls, including automated pre-trade controls, which can limit or prevent a DEA Customer from placing an order that exceeds a relevant intermediary's existing position or credit limits.

(8) Adequacy of Systems

Intermediaries (including clearing firms) should have adequate operational and technical capabilities to manage appropriately the risks posed by DEA.

Appendix 4

Public Comments Received by the Technical Committee on the Consultation Report *Policies on Direct Electronic Access*

List of Respondents

Association Française de la Gestion financière (AFG)
Association française des marchés financiers (AMAFI)
Börse Frankfurt and Exchange Supervisory Authority of Hesse
Bundesverband Investment und Asset Management e.V. (BVI)
Bursa Malaysia
Credit Agricole Cheuvreux S.A.
DBS Vickers Securities (Singapore) Pte Ltd. (DBSV-iDirect)
Dutch Advisory Committee Securities Industry (DACSI)
Eurex Clearing AG
Financial Services Board of South Africa (FSB)
FIX Protocol Ltd.
Fortis Bank Nederland
Fortis Clearing Singapore Pte Ltd.
Futures Industry Association (FIA)
Goldman Sachs International
Investment Company Institute (ICI)
London Stock Exchange
Managed Funds Association (MFA)
Mizuho Securities Co. Limited
Multi Commodity Exchange of India (MCX)
National Futures Association (NFA)
Natixis Securities
Newedge Group
Nomura Securities Co. Ltd.
OCBC Securities Pte Ltd.
Ong First Tradition Pte. Ltd
Phillip Capital
Société Générale
UBS
UBS Futures Singapore Ltd. and UBS Securities Pte. Ltd.
UOB Bullion and Futures Limited

SJ/EP – n°2576/Div.

Mr Greg Tanzer
Secretary General
International Organization of
Securities Commissions
C/ Oquendo 12
28006 Madrid
Spain

20th May, 2009

Re: ASSOCIATION FRANCAISE DE LA GESTION (AFG)'s comments on IOSCO Consultation Report regarding Policies on Direct Electronic Access

Dear Mr Tanzer:

The ASSOCIATION FRANCAISE DE LA GESTION (AFG)[1] would like to thank IOSCO for having solicited comments on its Technical Committee Report regarding Policies on Direct Electronic Access.

[1] The Association Française de la Gestion financière (AFG) represents the France-based investment management industry, both for collective and discretionary individual portfolio managements. Our members include 409 management companies and 660 investment companies. They are entrepreneurial or belong to French or foreign banking or insurance groups.

AFG members are managing 2400 billion euros in the field of investment management. In terms of financial management location, it makes the French industry the leader in Europe for collective investments (with 1300 billion euros managed by French companies, i.e. 23% of all EU investment funds assets under management, wherever the funds are domiciled in the EU) and the second at worldwide level. In terms of fund domiciliation, French funds are second in Europe and third at worldwide level. Regarding product interests, our association

General Comments:

Let's first stress, for the knowledge of IOSCO members, that management companies should be considered as being part of the most important DEA customers. First, in volume, management companies represent a large part of the professional customer market. Second, in quality, management companies (contrary to the proprietary trading desks of banks for instance) act on behalf of end-investors, which are retail investors very often, vis-à-vis which they bear a fiduciary duty. For these two reasons, we ask IOSCO to take carefully into account the comments from management companies.

Many French investment management companies use various Direct Electronic Access modes. A few French management companies are direct members of regulated markets; many other French management companies make use of Automated Order Routing through intermediaries' infrastructure (AOR) and/or Sponsored Access (SA).

Our members trade on many different marketplaces over the world, as the French asset management industry is one of the top ones at global level – in particular for collective portfolio management. From this perspective, Direct Access is very helpful, both for facilitating and fastening the execution of orders as well as reducing fraud - such as front-running/trading ahead of the DEA customer, or post-trading reallocation of orders by intermediaries, in some parts of the world, which harm management companies acting on behalf of the end investors.

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Detailed comments:

I. Pre-conditions for DEA:

a. 1st pre-condition for DEA: Minimum Customer Standards:

AFG members fully agree on the 4 minimum standards identified by IOSCO. We cannot imagine that these standards could not be required as they are necessary to manage the systemic and the credit risks related to trades by DEA customers.

b. 2nd pre-condition for DEA: Legally Binding Agreement:

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represents – besides UCITS – the employee saving scheme funds, hedge funds/funds of hedge funds as well as a significant part of private equity funds and real estate funds. AFG is of course an active member of the European Fund and Asset Management Association (EFAMA) and of the European Federation for Retirement Provision (EFRP). AFG is also an active member of the International Investment Funds Association (IIFA).

We agree that there should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided. The key points of it are those identified in p. 15 of the IOSCO Report.

Conversely, we don't think that SA DEA customers should be required to enter into a contractual relationship with the market, as we think that the intermediary must stay responsible vis-à-vis the market for the SA it has agreed on with its SA DEA customers (and in any case the intermediary may refuse such a SA to its customers). Requiring a contractual relationship between the SA DEA customer and the market would create an uncertainty from this perspective, by potentially lowering the responsibility of the intermediary vis-à-vis the market.

c. 3rd pre-condition for DEA: Sub-delegation:

As a general principle, we don't agree on the possibility for a DEA customer to sub-delegate its direct access privileges directly to another party, as we think that from a systemic perspective it increases risks.

However, if IOSCO wants to generalise such such-delegations in spite of the systemic risks involved, then it should be at least necessary that the responsible intermediary's contractual arrangements with its DEA customer allow it to identify the sub-delegatee if required by a market authority.

In addition, a specific contract between the DEA customer and its sub-delegatee should be required. In particular, such a contract – as well as the contract between the intermediary and the DEA customer – should make clear that the responsibility of the DEA customer remains although it may sub-delegate this DEA to a sub-delegatee. By analogy, a similar requirement exists today for management companies when they delegate some of their official functions: the fact of delegating some functions does not repeal the liability of the relevant management company.

The areas to be covered by such a contract should be the same as those required from DEA customers, which were identified above, as the sub-delegatee would play the same role as a direct DEA customer.

II. Information Flow:

a. Customer Identification:

We agree that intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

b. Pre and Post-Trade Information:

We agree that markets should provide member firms with access to *some* pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

However, we are not sure that *all* pre- and post-trade information should be delivered, in particular regarding pre-trade information. For instance, it must be avoided that pre-trade information which would facilitate the identification of DEA customers could lead to market abuse such as front-running/trading ahead of the customer for instance. For this reason, pre-trade information should be partly anonymised.

In addition, regarding post-trade information, this information should be made available to the larger public and not only to member firms.

III. Adequate Systems and Controls

a. Markets:

We agree that, *in principle*, markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

However, and as already mentioned above, such pre-trade controls should not increase the risk of fraud by the intermediaries through front-running/trading ahead at the expense of customers.

b. Intermediaries:

We agree that intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters (such as “fat finger” stop buttons to more sophisticated filters applying customer position and/or credit limits), which can limit or prevent a customer from placing an order that exceeds existing position or credit limits on such a customer.

We also agree that intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

But we think that pre-trade filters should not be replaced *only* by post-trade controls, as obviously it is better to avoid mis-trading ex ante rather than to try fixing it once it has occurred. Fast execution is important, but it must not be done at the expense of market disturbance afterwards.

As far as possible, pre-trade controls should be at the market level rather than at intermediary level. The market have a better vision of all the players, and in addition it is not conflicts by

interest (contrary to intermediaries, which might be tented by frauds such as front-running/trading ahead of customer orders).

In addition, DEA systems and control procedures should be similar or equivalent to those applied at present to non-DEA business.

Regarding "drop copies" dropped by SA customers to their intermediaries, we think that these copies represent useful information for the relevant intermediaries even if the orders could not be stopped prior to execution. If some intermediaries are reluctant to the use of such "drop copies", then they are still free to refuse them in their contractual arrangements with the relevant DEA customers.

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We thank you in advance for your attention to the views expressed above.

If you wish to discuss the contents of this letter with us, please contact myself at +33 1 44 94 94 14 (e-mail: p.bollon@afg.asso.fr) or Stéphane Janin, Head of International Affairs Division at +33 1 44 94 94 04 (e-mail: s.janin@afg.asso.fr).

Sincerely,

Pierre BOLLON

OICV-IOSCO CONSULTATION REPORT

POLICIES ON DIRECT ELECTRONIC ACCESS

Comments by AMAFI

1. *Association française des marchés financiers* (AMAFI) has more than 120 members representing over 10,000 professionals who operate in the cash and derivatives markets for equities, fixed-income products and commodities. Nearly one-third of the members are subsidiaries or branches of non-French institutions.

2. AMAFI welcomes the opportunity to comment on the Consultation Report (hereafter referred as to the "Report" on "Policies On Direct Electronic Access" issued by the Technical Committee of the International Organization of Securities Commissions.

3. Before answering the specific questions raised by the "Report", AMAFI would like to emphasise some general comments.

I) GENERAL COMMENTS

➢ *The publication by IOSCO of guidance with respect to Direct Electronic Access (DEA) would be particularly useful*

4. The developing of DEA has increased significantly in the previous years. This is due to the evolution of technology, to the growing competition within trading venues and to the commercial pressure of customers. Given that the publication by IOSCO of guidance is appropriate in order to prevent the risks raised by DEA.

5. Would any guidance be published by IOSCO, AMAFI encourages each regulator to deliver locally the global standards. A common approach in various jurisdictions would reduce potential regulatory arbitrage, set up a level playing field among the various jurisdictions and lower the compliance costs of brokers which offer DEA services.

➢ *The definition of DEA should be amended.*

6. On a general basis, AMAFI considers that the content of the "Report" is pertinent and accurate. Therefore AMAFI believes that the issues raised by "Direct Access by Non-Intermediary Market-Members" are very different from those raised by "Automated Order Routing Through Intermediary's Infrastructure" (AOR) or "Sponsored Access" (SA). In the first situation, the market

member which is not registered as an intermediary has the same obligations than another market member. It is true, as mentioned in the report, that a non registered intermediary has to enter a clearing arrangement with a General Clearing Member (GCM) but the situation is the same for a registered intermediary which is not a clearing member. More generally, AMAFI considers that DEA does not raise specific issues concerning the Clearing of the transactions. The clearers have the same responsibilities and face the same risk in all situations whenever the trading firm is registered or not and whenever the trading firm offers DEA to its customer or not.

7. Therefore, AMAFI suggests the Technical Committee to reconsider the "Report" by defining DEA only in the case of AOR and SA and by focusing on the relationship between the trading member and its customers.

➢ *Sponsored Access raises specific issues.*

8. SA, at least in Europe, is a relatively new possibility offered by the market infrastructures. AMAFI considers that the rules governing SA should be at the same level as the rules governing AOR. In particular, pre trade filters should be put in place by the market members and/or the markets even if it is at the expense of latency. Being too flexible in this area could create risks for the market integrity and for the broker which offers SA. In theory, a broker should never accept to provide a customer with SA without a sound an reliable risk management tool, but in practice, commercial pressures could lead some brokers to take more risks at the expense of the market integrity and of there competitors.

➢ *In some jurisdictions, the market rules should be modified.*

9. The orders introduced by a customer through a DEA arrangement are under the responsibility of the firm which offers this type of services. In some jurisdictions (for instance in Germany) each access to the market is allocated to an employee (trader) of the firm which is responsible of the entire orders send trough this access. This situation prevents the setting up of DEA arrangements where the responsibility of the orders should only rely on the firms. The market rules should be changed or at least technical arrangement should be put in place in order to avoid this kind of situation.

II) IOSCO QUESTIONS

Pre-condition for DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- Appropriate financial resources;
- Familiarity with the rules of the market and ability to comply with the rules of the market;
- Knowledge of the order entry system which the Customer is permitted to utilize;
- And proficiency in the use of that system.

Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

10. AMAFI agrees with these minimum requirements

(2) Legally Binding agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.

- What are the key points to be addressed in such a contract? See section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

11. AMAFI is in favour of a recorded, legally binding contract between the intermediary and the DEA Customer. The elements mentioned in V.B (2) are appropriate and can be included in the contract. Concerning SA, AMAFI consider that a tree party's contract could be signed between the intermediary, the DEA Customer and the market in order to define precisely the roles and responsibilities of each party.

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identity the sub-delegatee be if required by a market authority.

- What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

12. For AMAFI, the responsible intermediary has a contractual relationship with its DEA customer only. If the DEA customer is allowed to sub-delegate its direct access, the responsibility should remain at the customer side. If a market authority (by market authority it must be understood a regulator) needs to identify the sub-delegatee, it should directly address its request to the DEA Customer. Therefore AMAFI is not in favour of this principle.

Information Flow

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

- What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?). Please explain.

- Should DEA Customers each be assigned their own Customer ID or mnemonic?

Please explain.

13. AMAFI believes that the identification of their DEA customers or the identification of the potential sub-delagatee in order to facilitate market surveillance is not an issue. On request, the intermediary (and also the DEA Customer) can easily provide the market authority (by market authority it must be understood a regulator) with the identity of its DEA Customer (sub-Customer). This does not imply any specific technical requirement.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

- Do you agree with this proposed principle? If not, please explain.

- What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

14. AMAFI agrees with this principle. It must be pointed out that concerning AOR arrangements, the responsible intermediary still has the information from the markets. The needs are the same for AOR DEA than for other types of orders managed by the firm. The Principle should focus on SA arrangements which should only be possible if the intermediary has a view of pre-trade information in order to be able to stop the orders.

Adequate Systems and Controls

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

- Do you agree? If not, please explain.

15. AMAFI agrees with this principle

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

16. AMAFI considers that these principles should only concern trading firms and not clearing firms. The responsibility to conclude a DEA arrangement relies only on trading firms (whether the trading firm is self clearer or not) and has no consequence on the clearing of the transactions. Anyway it would be impossible for a clearing firm (General Clearing Member) to monitor post trade information of the clients (DEA customers) of their clients (trading firms).

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

17. Yes automated pre-trade filter for AOR and SA are desirable and feasible.

- Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit traders that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

18. Both types of filter may be necessary.

- As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

19. AMAFI really believes that post trade control are not sufficient to manage risks involved in DEA transactions. We understand the needs of some markets participants to have the fastest execution possible but this must not be done at the expense of the market integrity and in a way that increases the market risk taken by the intermediary which provides DEA arrangements.

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

20. For AOR arrangement, pre-trade control is made at the intermediary level. For SA arrangement, both should be possible. The responsibility assumed by the market should be defined in the tree-parties contact mentioned above.

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

21. There is no reason to have, in principle different systems and control procedures for DEA and non DEA business. For DEA, the key issue is the need of a robust and reliable automatic system.

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

22. The CCP is not involved and has not to be involved specifically in the risk management relating to DEA. Anyway, the CCP has no information about the DEA arrangement signed by the trading firms.

- When a non-clearing market-number places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

23. AMAFI does not understand this question. The clearing firm which has the possibility to accept or not a trading firm, faces the same credit risk whether the trading firm is registered or not.

- Can intermediaries who receive “drop copies” of their SA customer’s orders stop the orders prior to execution? If not, what is the utility of such a tool?

24. On a first analysis, this kind of arrangement does not seem sufficient.

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

25. AMAFI consider that the analysis provided by the “Report” on latency concerns is pertinent.

Contact:

Emmanuel de Fournoux – Director of Market Infrastructures, edefournoux@amafi.fr +331 53 83 00 70

BÖRSE FRANKFURT

Mr. Greg Tanzer
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

Frankfurter Wertpapierbörse

Trading Surveillance Office

Neue Börsenstraße 1
60487 Frankfurt/Main

Mailing address
60485 Frankfurt/Main

Phone
+49-(0) 69-2 11-17253

Fax
+49-(0) 69-2 11-617253

Internet
deutsche-boerse.com

E-mail
carl-frederik.scharffenorth@
deutsche-boerse.com

19 May 2009

mz

Dear Mr. Tanzer,

We are pleased to comment on the IOSCO paper "Policies on Direct Electronic Access", which are not only based on the Trading Surveillance Office view and surveillance expertise, but also on the view of the Exchange Supervisory Authority of Hesse/Germany.

Comments apply for AOR, SA and Direct Access. These definitions are medium and long term not sufficient, because there is a tendency within the financial industry to "de-intermediation" which will result in a "direct access by Non-Intermediary Market Members". This eventually erases the whole exchange set-up and applicable regulatory framework (e.g. admission to trading, registered qualified traders, fit and proper test). Today's exchange participants/members will shift themselves more and more into a role of interface resellers (system provider/access to trading engine). The added value provided by the so-called exchange members then will be limited mainly to risk-management. All other services such as complaint management, back-office services will be or have already been transferred to different parties (outsourcing of services). We see especially the internal risk management and basic surveillance requirements in danger if the proposed policies on direct electronic access will be in place. The reasons for this view will be explained in detail by each single comment.

Page 26; B. (1) Pre-conditions for DEA: Minimum Customer Standard

In principle we agree with the above mentioned minimum standards. However, in combination with the 'principle undisclosed DEA clients (Section C)' it raises some severe issues: How to control, investigate and enforce these requirements if transactions and orders are not identifiable by the order or trade generator (beneficial owner)? In cases where a technical set-up leads to a "**multiple chains**

of DEA clients" order flow any control, investigation and enforcement is hardly possible. No pattern creation is possible to identify rules specific allegations. The responsible intermediary/member loses the required information as well and will not be able to apply efficient pre- and post trading analysis. Based on this and in combination with the lack of client's direct legal accountability such principles will serve just as a "fig leaf" of an orderly, fair and regulated market. As a pre-requisite for such an orderly, fair and regulated market an identification of each DEA client (final end-user, beneficial owner) is **inevitable**.

Page 27; B. (2) Pre-conditions for DEA: Legally Binding Contract

No, because this set-up will not be able to tackle relationships of multiple chains of DEA clients. In addition such a legal binding contract would be applicable only between intermediary and customer and hence it follows that an efficient enforcement of exchange rules is not possible any more. Therefore we favour a relationship between the DEA customer and the respective market based on direct legal provisions (law). Otherwise the intermediary/exchange member is able to contract out of liability, because he may state that he is not responsible for the vicarious liability (liability of his customer). In such cases only a breach of rules with respect to primarily principles of organizational responsibility could be the basis for any enforcement of exchange members/intermediaries.

Page 27; C. (1) Customer Identification

In general it has to be distinguished between the identity (personal details and data such as name and address) and the identification of different clients, without providing personal details. For the detection and investigation of potential rule breaches and or market abuse patterns transactions and orders must be distinguishable and in principle to be separated from "other" clients. Otherwise no pattern creation is possible at all and no initial suspicion can be raised. If no initial suspicion can be raised there is no need to identify personal details 'up-request', because in most cases there will be no cause to request those specific individual data. We strongly recommend having a legally binding (by law) intermediate step (between anonymity and disclosure of individual data). Each customer (end client; beneficial owner, order generator) should have his own persistent Customer ID or mnemonic. For practical reasons this ID must be at least persistent for each market (respective trading place; regulated market, MTF etc.) and be provided by the market operator. As a pre-requisite for an orderly, fair and regulated market an identification of each DEA client (final end-user, beneficial owner) is **inevitable**.

Page 27; D. (1) Adequate Systems and Controls, Markets

No, if principle of C is applied, because in spite of such a rule the market could

not analyse trading to prevent any abusive behaviour (lack of identification, especially in case of multiple order chains). Please refer to our reasoning of section C and section B for a contractual relationship with DEA clients.

Page 27; D. (2) Adequate Systems and Controls, Intermediary

It has to be distinguished between regulatory and financial controls (clearing risks).

Regulatory controls.
As outlined above the intermediary provides more and more purely interface access (trading access). Regulatory rules should be directly applicable to the individual DEA customer and DEA customers should sanctioned by the respective market.

Financial controls
Financial controls such as position limits should be monitored and controlled by a third party (this is not necessarily an intermediary) such as a clearing firm. A clearing house must be aware of each individual DEA client (irrespective of multiple order chains, thus beneficial owner, order generator) to tackle default risk. If identification as outlined in comment on section C is not available the overall market stability is at risk: Aggregated risk do hide individual risk exposure.

Yours faithfully,

Michael Zollweg
Head of Trading Surveillance

Carl-Frederik Scharffenorth
Trading Surveillance

Bundesverband Investment
und Asset Management e.V.

Contact:
Marcus Mecklenburg
Phone: +49.69.154090.236
Fax: +49.69.154090.136
marcus.mecklenburg@bvi.de

May 25, 2009

Mr. Greg Tanzer
Secretary General

IOSCO The International Organisation
of Securities Commissions
C / Oquendo 12
28006 Madrid
SPAIN

Public Comment on Policies on Direct Electronic Access: Consultation Report

Dear Mr. Tanzer,

BVI[1] welcomes the opportunity to remark on the IOSCO Technical Committee consultation report pertaining to policies on direct electronic access.

General Remarks

The German investment fund industry appreciates that IOSCO recognises the importance of direct electronic access, and supports IOSCO's efforts to issue principles aimed at protecting the integrity of financial markets. The elements for possible principles suggested by the IOSCO Technical Committee to bring forward direct electronic access are welcomed by BVI members with respect to all three pathways, i.e. AOR, SA, and direct access by Non-Intermediary Market-Members.

According to BVI members, the element of professional qualification (including market experience) of people handling order systems is of utmost importance. In addition, appropriate check routines and order limits in the order flow might prove to be helpful in order to prevent "fat finger" mishaps. These prerequisites, however, must be set up in a manner which is able to intervene before the critical order actually reaches the market.

[1] BVI Bundesverband Investment und Asset Management e.V. represents the interest of the German investment fund and asset management industry. Its 92 members manage currently assets of nearly EUR 1.5 trillion both in mutual funds and mandates. For more information, please visit www.bvi.de.

Director General:
Stefan Seip
Managing Director:
Rüdiger H. Päsler
Rudolf Siebel

Eschenheimer Anlage 28
D-60318 Frankfurt am Main
Postfach 10 04 37
D-60004 Frankfurt am Main
Phone: +49.69.154090.0
Fax: +49.69.5971406
info@bvi.de
www.bvi.de

Confidentiality of Investor Trading Information Should be Protected

We recognise the need for regulators and intermediaries to monitor orders and utilise information about trades to prevent market manipulation and abuse. In crafting regulations concerning DEA arrangements, however, regulators must be careful to protect the confidentiality of fund trading information. The confidentiality of this information is a critical issue to BVI members. Any leakage of this information can lead to front running of a fund's trades, adversely impacting the price of the stock that the fund is buying or selling to the detriment of its shareholders.

The Consultation Report contains several principles that raise concerns in this area. For example, the Consultation Report states that (1) markets should provide member firms with access to all pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls, and (2) intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance.

BVI believes that information regarding an investor's orders and trades that is disclosed must be limited to information that is relevant to specific risk concerns created by the particular DEA arrangement. Information that is not relevant to the DEA arrangement would not enhance the monitoring and risk management of these arrangements and could expose an investor's trading information to potential misuse. The scope and details of information that would be disclosed under the Consultation Report's principles is unclear.

In order to mitigate the risks that arise when an investor shares information with an intermediary, we recommend that DEA regulations contain meaningful and enforceable confidentiality safeguards applicable to both intermediaries and any other recipients of the data (e.g., exchanges). These safeguards should, at a minimum, require the recipients of the information to maintain the confidentiality of the information and to use it exclusively for regulatory purposes.

Regulations Should Provide Flexibility to DEA Arrangements

Numerous methods of direct electronic access exist and operate differently from one another. In adopting and implementing DEA regulations, we urge regulators to not take a "one size fits all" approach to the regulation of DEA arrangements. Instead, consideration should be given to factors such as the type of investor using the arrangement, the specific methods of DEA, and existing rules and regulations. Failure to give appropriate consideration to these factors could result in regulations that are unnecessary, burdensome and inflexible. Such regulations also could limit the ability of intermediaries to provide efficient and competitive DEA services to investors.

Impact of Requirements on Sponsoring Intermediaries and Exchanges Should be Considered

Prior to adopting any new or amended regulations regarding DEA arrangements on sponsoring intermediaries and exchanges, regulators should carefully consider any potential unintended consequences of the impact of these regulations on the end-user, the investor. For example, if these regulations are too onerous or costly for certain intermediaries, they may determine to not offer DEA arrangements, thereby reducing the number of available trading venues for investors and potentially negatively impacting best execution. Similarly, the cost of trading may be increased as intermediaries shift the burden of compliance with the requirements onto investors. We believe that providing intermediaries with flexibility to utilise existing risk management controls that they determine are the most effective should be considered and may best serve the interests of the securities market and investors.

We hope that our comments will help the IOSCO Technical Committee to proceed its work on policies on direct electronic access and remain at your disposal for any questions you may have.

Yours sincerely

BVI Bundesverband Investment und Asset Management e.V.

Signed:
Rudolf Siebel

Signed:
Marcus Mecklenburg

From: Gerald BLONDEL
Sent: Wednesday, May 13, 2009 6:21 AM
To: DEA Consultation Report
Subject: Policies on Direct Electronic Access

Dear Greg,

Please find my comments & answers to your Policies on Direct Electronic Access consultation report.
My answers are marked by >>

Best Regards,

Pre-conditions for DEA:
(1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:
? appropriate financial resources;
>>[yes] familiarity with the rules of the market and ability to comply with the rules of the market;
>>[yes] knowledge of the order entry system which the Customer is permitted to utilize; and
? proficiency in the use of that system.
o Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

>>SA DEA customers are usually inter-broker business. This means that they have already their own Order Management System (OMS) that they are connecting directly to our DMA/Trading infrastructure.
We are not so worried about their proficiency in the use of their own system. But we put a strong emphasise on the market knowledge (business and rules) and the Know your Client (KYC).

(2) Legally Binding Agreement:
POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.
>>[YES] o Do you agree? If not, please explain or elaborate.
o What are the key points to be addressed in such a contract? See section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

>> The intermediairy is fully responsible for its SA DEA activity. The SA DEA Customer is known by the Exchange, but no agreement is necessary.
It is the main difference between SA and non SA. non SA customers are not declared to our DMA Operations Team.

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(3) Sub-delegation:
POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.
o What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should

the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

>> SA can not be sub-delegated.
>> non SA: [opinion / not fact] I think the sub-delegatee should be under the risk management of the DEA customer.

C. Information Flow
(1) Customer Identification
POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.
o What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.
o Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.
>> In our Exchange, the clearing house manage until the final client account. We do not stop at the clearing member level. The only exception is when the client trades via an Omnibus client. In this case, Exchange may require client detail from the intermediairy.

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(2) Pre and Post-Trade Information
POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.
28
>> [YES] o Do you agree with this proposed principle? If not, please explain.
o What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?
>> We are providing to our intermediaries, realtime drop copy [post order entry] and realtime clearing information [trade post matching]
Since our SA DEA solution is centralized at our exchange, they have a remote risk monitoring screen to follow client daily position in realtime.

D. Adequate Systems and Controls
(1) Markets
POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.
>>[YES] Do you agree? If not, please explain.

---

(2) Intermediaries
POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.
>> Agree

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.
o Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.
>> Agree; we implemented the following:
Derivatives:
-Max number of contract for 1 order
-Maximum daily long (per contract and per product family)
-Maximum daily short (per contract and per product family)
-Max gross position
-Price control [far from the last daily traded price].
- [far from market spread].

Equities:
- Max capital per order
- Max daily capital
- Type of instrument
- Type of market
- Price control [far from the last daily traded price].
- [far from market spread].
- Short selling authorization

o Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?
>> Yes. Pre-trade risk filters ARE NOT consider as risk management.
For Derivatives, Daily position pre-trade risk filters are available. But there is no position limit management. Managing the portfolio of every client would increase too much the latency. Proper position management has to be done by the clearing member using realtime clearing information.

o As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?
>> Faster, easier, but it does not prevent fat finger. I minimum pre-trade risk filtering should be mandatory.

o Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?
>> We implemented pre-trade risk filters at the market level. Nevertheless, the intermediary may switch it off IF it has the equivalent risk filters activated in its own system.

o Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.
>> SA DEA is for very low latency traders. We can not have the same level of pre-trade risk filter. But post-trade risk management should be the same.

o Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?
>> On Derivatives, yes.
>> On Equities, we are not realtime. So, we should, but at this moment we do not do it. Nervethess, we are providing the drop copy, which enable the intermediate do do realtime risk management.

o Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?
>> The drop-copy is generated from the Order Acknowledgement message. The order is already in the book, so it can not be stop.
Drop copy is used by the intermediary for Risk Management and Market behaviour analysis to ensure orderly market from its clients.

o Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem
>> Low latency access is available to anyone who want it. So there is no problem of equitable access.

o Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.
>> Drop Copy application, allowing him a realtime monitoring of its clients' trading activity & Pre-trade risk filter.

Gerald Blondel
Head, Infrastructure Planning
Global Market Strategy
DMA Project Director
Bursa Malaysia

CHEUVREUX
FRANCE

Mr Greg TANZER
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

Paris, 20 May 2009

RE: Public Comment on Policies on Direct Electronic Access

Dear Sir,

Credit Agricole Cheuvreux S.A. (Cheuvreux) welcomes the opportunity to express its views on the Consultation Report issued by IOSCO in February 2009 (the Report), relating to Direct Electronic Access (DEA). Our intention in the following answer is to underline the benefits that could be drawn upon the adoption of measures implementing an homogenised framework for DEA arrangements.

Cheuvreux is a pan-European agency brokerage firm, offering electronic services to its clients within 15 countries, and accessing to 60 execution venues, in Europe and in the United States. With a dedicated execution platform, Cheuvreux offers direct market access, smart order routing and execution services including algorithmic trading. Cheuvreux is a wholly-owned subsidiary of Calyon S.A., the investment banking arm of the Credit Agricole Group.

Cheuvreux generally agrees with the answers formulated by the French Financial Market Professionals Association (AMAFI), but would like to underline the points developed hereafter.

1. General Consideration

While we agree with the distinction proposed in the Report, as regards the different ways to deal electronically in markets (DEA arrangements), we think that Sponsored Access (SA) and Direct Access by Non-Intermediary Market-Members (DANIM) both raise specific concerns relating to the attribution of responsibilities for monitoring and control purposes, between customers, markets (and in the case of SA, intermediaries).

Even though it is fully understandable from a customer's point of view that SA provide an efficient mean to reduce latency – thinking especially of structures that trade high volumes such as hedge funds or proprietary trading desks, those types of market access may however prove very difficult to monitor: it is most probable that intermediaries, if in charge of such monitoring, would not be able to impose on their customers a comprehensive set of pre-trade controls, including but not limiting to pre-trade filtering devices. Monitoring orders on a post-trade basis, although necessary, is clearly not sufficient in itself as regards risk mitigation. And getting rid of controls that have been previously implemented in order to protect market integrity does not make any sense. In the end, SA agreements tend to de-correlate the weight

Crédit Agricole Cheuvreux S.A.
9, quai du Président Paul Doumer – 92920 Paris La Défense cedex
Tel +33 (0)1 41 89 70 00 – fax +33 (0)1 41 89 70 05 – www.cheuvreux.com
Siren 788 108 223 RCS Nanterre - SA au capital de 39.239.816 EUR

of legal responsibilities put on intermediaries from their effective abilities to bear these responsibilities, thereby creating a disproportionate and unfair situation.

DANIM, while raising similar issues, adds a further layer of concerns related with credit risk management and "Know Your Customer" due diligence (KYC), usually assured by intermediaries.

More Generally, allowing users to access markets outside the intermediaries infrastructures challenges risk management approaches as regards market manipulation, market integrity, and insider dealing, not to mention counterparty risks supported by the responsible intermediaries themselves.

2. Specific answers to questions raised by IOSCO

Q. B.1: DEA Customers should be required to meet minimum standards

We fully agree with the idea that DEA Customers should all be required to meet minimum standards, including appropriate financial resources, familiarity with market rules and regulations and commitment to abide by these rules, knowledge and proficiency of the system used to enter orders. The list provided in the report (part V.2.B) should be seen as a minimum.

Q. B.2: There should be a recorded, legally binding contract between the intermediary and the DEA Customer

Also, the responsibilities of the market, the customer – and the intermediary in the case of Automated Order Routing (AOR) and SA – shall clearly be stated in the agreement.

As a consequence, we think that markets offering the ability for customers to send orders through AOR, SA or DANIM agreements should set and enter into specific contractual relationships emphasizing the need for customers to demonstrate their ability to monitor flows through adequate systems and organizations.

Q. C.2: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Providing intermediaries with pre and post-trade information, even on real-time basis, will not prove sufficient to implement appropriate monitoring: should intermediaries remain responsible for monitoring and controls over SA, they would need markets to also provide them with adequate systems to make sure that orders get properly filtered. At the moment, the conditions for such filtering are clearly not met.

Q. D.2.1: Intermediaries should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

Q. D.2.2: Intermediaries should have adequate operational and technical systems to manage their DEA systems.

Although we agree with the above statements, it is worth noting that making intermediaries responsible for controls over orders sent by entities they cannot structurally monitor and control appropriately, would make no sense as regards basic standards of regulation: this may not prove satisfactorily at all for markets and may impair serious damage to the quality of the

order book microstructure and the related market integrity, fairness and efficiency. As regards the intermediaries themselves, they need to remain in a capacity to manage the counterparty risk they would face, e.g. should the customer go bankrupt: it is through appropriate KYC diligence and risk management procedures that this risk can be assessed.

Furthermore, we have witnessed an increase in the competition between investment services providers, a movement that, from the strict point of view of controls, can be seen as a "race to the bottom": indeed, entities imposing less controls have a reversely proportional advantage in the competition, as they can market substantially reduced latencies to their customers. Letting SA or DANIM offers develop without any obligations regarding the framing and filtering of orders is an incentive pushing customers to choose routing paths that may prove damageable to markets, as competing entities seek to diminish or even avoid restricting measures over their flows.

3. Concluding remark

In conclusion, we are not opposed to any kind of DEA arrangements, provided that all actors be subject to the same level of regulation as regards controls. Especially since the implementation of MiFID and the fragmentation of the European financial landscape, it is crucial that regulators remain in a capacity to ensure a same-level playing field between different actors, all contributing to the making of prices and the integrity of financial markets and alternative trading venues. In this context, it is important not to create different classes of customers and discrepancies as regards systems and controls, impairing unfair situations for those who would not be able to enter into SA or DANIM agreements. Also, we think that offering the ability to access markets to third parties that are not licensed market members and, therefore, not knowledgeable about the functioning of the markets and the related sanctions regimes, could lead to inappropriate practices and activities being conducted on the market unless it can be demonstrated that such access will be to the benefit and in the best interests of other market participants.

Remaining at your disposal to discuss the above,

Yours faithfully

Bertrand PATILLET
Executive Vice President

Crédit Agricole Cheuvreux S.A.
9, quai du Président Paul Doumer – 92920 Paris La Défense cedex
Tel +33 (0)1 41 89 70 00 – fax +33 (0)1 41 89 70 05 – www.cheuvreux.com
Siren 788 108 223 RCS Nanterre - SA au capital de 39.239.816 EUR

From: Daniel Lee Cheok Ching []
Sent: Wednesday, April 15, 2009 11:08 AM
To: DEA Consultation Report
Cc:
Subject: Policies on Direct Electronic Access

Dear Greg

Please our comments (I have commented on the areas that we have an opinion,
otherwise we agree with the policy).

B. 1. Minimum Customer Standards

For instutional clients that use their own order entry system (e.g. Charles
River, Fidessa, GL Sungard, ITG etc). As such, there is no requirement on the brokers to ensure that the client is profiecient in the use of the system or have knowlegde or the order entry system. Usually brokers (unless
they are also technology providers) do not provide an Order Entry System to
the institutional client.

B2. Legally Binding Agreement

The main point for the general agreement would be that the client acknowledge that they are responsible for the trades that they enter and that they indemnify the brokers against any fines and penalties arising from their actions.

Customer Identification

This would make it unnecessary for DEA trades, e.g. for fund managers that
have several sub-accounts, trading is done on an omnibus basis and the trades are booked out to specific account on a post-trade basis, e.g. using
OMGEO OASYS as a backend process

Adequate Systems and Controls

It would be important to have a Risk Management System (RMS) to set certain
trading parameters. Some brokers may remove the RMS to improve latency. To
ensure a level playing field and to ensure that there is an adequate control system is in place for DEA trades, regulations should be set that make it a requirement that such RMS be implemented. Otherwise brokers that
decides not to implement a RMS would be able to provide better latency at the expense of prudent risk management.

Please call me at the numbers below if you wish to discuss this further.

Regards
Daniel Lee
Director
DBSV-iDirect / Group Institutional Business
DBS Vickers Securities (Singapore) Pte Ltd
DID: 65-63986902
Fax: 65-62268211
Handphone Number: 65-98350513
(Co. Regn. No. 198600294G) BlackBerry PIN: 2544B958
DBS. Living, Breathing Asia

DACSI 09-081

Memo

Re : Comments on IOSCO's Consultation Report "Policies on Direct Electronic Access"
To : Greg Tanzer, IOSCO
From : Michelle Saaf (vice chair) and Henk Bruggeman (secretary), DACSI
Date : 11 June 2009

The Dutch Advisory Committee Securities Industry (DACSI) is pleased to have the opportunity to comment on IOSCO's Consultation Report "Policies on Direct Electronic Access". We are using this opportunity thankfully, and wish to express that the consultation report is an impressive and well-prepared document that is thought-provoking and inviting readers to think thoroughly about the subjects covered.
Some of the members of DACSI have submitted individual comments, edited by their own – often international – organizations. This comment by DACSI is to be read as supplementary, and as the result of discussions between DACSI members.

SPONSORED ACCESS: THE INTERMEDIARIES' VIEW

1. This paper defines 'sponsored access' and sets out our view of the systems and controls designed to ensure that sponsored access can be provided consistently with the regulatory obligations of the parties.
2. Definitions:
    a. 'Client' means a firm which is authorised to deal [or arrange deals] in securities of the kind traded on the trading venue.
    b. 'Direct Market Access' means access to a trading venue provided to a client by a sponsor, in circumstances in which the client's order passes through the sponsor's technical infrastructure or control environment
    c. 'Sponsored access' means access to a trading venue provided to a client by a sponsor, in circumstances in which the client's order does not pass through the sponsor's technical infrastructure or control environment. It does not include 'direct market access'.
    d. 'Sponsor' means a firm authorised to deal in securities or to arrange deals in securities (a broker-dealer, bank or securities firm).
    e. 'Venue' means an exchange, multi-lateral trading facility or other trading venue open to the public. It does not include a 'systematic internaliser'.
3. We regard sponsored access as a limited market niche, which will suit that sub-set of clients who want to move beyond direct market access but are not ready or willing to undertake themselves the [legal and technical] obligations arising from direct membership of the venue. The reason that we have not included 'systematic internalisers' in our analysis is that they are already obliged to have systems and controls which cover the points made below.
4. The arrangements for sponsored access should be documented by an agreement between the sponsor and the client and an agreement between the sponsor and the venue. Schedules to these agreements will describe the technical arrangements in place.
5. We believe that venues should provide two forms of control between their gateway and their matching engine. The first is a control provided by the venue in support of its obligation to maintain an orderly market. This control is provided by the venue and is not configurable by the sponsor and the client. The exact form of the control is a matter for the venue. The control should support, and be consistent with, the venue's published policies. Examples of the policies implemented by this control would be:
    a. No unpriced orders
    b. No orders in excess of the quantity displayed on the book
    c. No orders in excess of a specified amount
    d. No orders at a price outside a certain variance from the mid-price.
6. The second control is configurable by the sponsor. The exact form of the control is a matter for the venue, in agreement with the sponsor community. The control should support, and be consistent with, the sponsor's published policies. The control should also support unpublished policies and

practices of the sponsor, relating, inter alia, to a 'restricted list' of securities, counterparty risk and credit controls. The control should permit the sponsor to suspend trading through sponsored access for one or more clients. Examples of the policies implemented by this control would be:

a. Restricted securities list: restrictions on trading for reasons related to specific regulatory provisions, reputational risk or conflicts of interest.
b. Maximum overall value (open interest and executed order value) using a gross measure of long and short value.
c. Maximum number of orders. This could be used not only as a health check but also to monitor the utilisation of the system.

clear to trade

Eurex Clearing AG

Response

IOSCO consultation

Policies on Direct Electronic Access, February 2009

20 May 2009

Eurex Clearing AG
Neue Börsenstraße 1
60487 Frankfurt/Main

Mailing address:
60485 Frankfurt/Main

Internet:
www.eurexclearing.com

A. Introduction

Eurex Clearing AG welcomes the opportunity to provide comments on the February 2009 consultation report of the Technical Committee of the International Organization of Securities Commissions entitled “Policies on Direct Electronic Access.” We participated in the background study associated with the report by completing IOSCO’s 2007 Questionnaire for Markets and Clearing Organizations, a survey seeking information on the rules and policies markets currently impose with regard to direct electronic access (DEA). This questionnaire was an earlier information-seeking step of IOSCO’s Project on Electronic Markets’ Access Policies and Rules, a project that we understand had the intention to identify the different approaches taken by markets and market regulators with respect to authorizing and monitoring electronic access to a market’s trade matching system for execution of orders.

Eurex is one of the world's largest derivatives exchanges and the leading clearing house in Europe. It provides an extensive range of products, including some of the world's most heavily traded derivative contracts. Eurex has always been at the forefront of electronic trading. With its success built on the development of robust and reliable trading and clearing technology, Eurex is able to serve markets around the globe. Its technology is regularly updated to meet the demands of customers, for example recent enhancements to further accommodate high frequency trading strategies or to provide links with other derivatives exchanges.

Eurex Clearing AG, a subsidiary of Eurex, provides clearing services for listed futures, options products as well as stocks and certain OTC markets. With clearing services for derivatives, equities, bonds and repos, our customers benefit from a high-quality, cost-efficient and comprehensive trading and clearing value chain. Its resilient and robust central counterparty clearing model has proven to be an important stabilizing factor in the global financial markets during recent times. Eurex Clearing sets industry leading standards with its real-time risk management and intraday margining.

B. Comments

Overall Comments

Exchanges and central counterparty clearinghouses (CCPs) have a stabilising role in the economy. Recent market turbulences have highlighted this stabilising function as well as the essential role of market infrastructure in the facilitation of the provision of liquidity and efficient capital allocation.

The legal framework within which exchanges and CCPs operate should emphasise and support that role. In this context, the aim of this consultation to facilitate a better understanding of the different ways that direct access is regulated and how markets address the relevant issues is highly relevant. By IOSCO providing detailed guidance on how direct access can be regulated, competent authorities should be able to encourage robust arrangements in their own markets.

Comments on Proposed Principles

In particular, we would like to comment on section VI which includes proposed guidance and consultative questions.

Pre-conditions for DEA: (1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize;**
- **proficiency in the use of that system.**

Response: We would agree that minimum standards should be met and should be rigorous.

Pre-conditions for DEA: (2) Legally Binding Agreement
POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

Response: We agree with this proposed principle. Information on contracts is valuable for the market to know although it is not necessarily required by the market. The management of the relationship between the intermediary and DEA customer falls under the responsibility of the intermediary. The market has to secure the proper legal relationship and responsibilities with the intermediary directly.

Pre-conditions for DEA: (3) Sub-delegation
POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

Response: From a market point of view there is no need and no economic reason for a sub-delegation. The sub-delegatee can enter into a direct agreement with the intermediary. The sub-delegatee should be required to meet the same requirements. However, the longer the legal chain to the final user, the more difficult it will be for sufficient market surveillance to be carried out. It needs to be secured that surveillance obtain sufficient access to the sub-delegate.

Information Flow: (1) Customer Identification
POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

Response: We agree with this proposed principle.

Information Flow: (2) Pre and Post-Trade Information
POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Response: We agree with this proposed principle. Since the member firm is fully responsible for the orders and transactions entered by its DEA customer, the markets should deliver the member firms with all relevant data in real-time to allow them to fulfil their duties. The intermediary must receive all order confirmations and trade confirmations of its own activities in real-time as well as those of the activities of its DEA customer or customer for which the member firm conducts clearing services. In addition, all other relevant information for risk management, like prices and theoretical prices, needs to be provided by the markets to the member firms in real-time. Order, trade, and risk information of the member firm and its customers needs to be provided by several means (on-line, reports, file-based) to ensure an effective processing on the member side which ensures an effective risk management.

Adequate Systems and Controls: (1) Markets
POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Response: We agree with this proposed principle.

Adequate Systems and Controls: (2) Intermediaries
POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

Response: We agree with this proposed principle (please see response below).

Adequate Systems and Controls: (2) Intermediaries
POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Response: We agree with this proposed principle. It should be ensured that member firms have adequate technical and operational measures in place to manage their own order flow and the order flow of their customers. It should also be ensured that the required measures are further implemented by the markets and their member firms.

Although pre-trade filters should be "easy" enough to be checked by the systems to avoid any negative impact on system performance/latency, measures to avoid for example "fat finger" errors are inevitable. As soon as the drop copy is distributed, the order is in the book and might be executed immediately without the possibility to be stopped. Therefore filters need to be implemented before the order is written into the order book. Post-trade controls can be much more complex but should also be done on a real-time basis to be effective. For meaningful calculation and analysis of risk-relevant data it should be ensured that all markets are able to deliver the relevant data real-time and that the data can be considered across multiple markets and asset classes for a full picture of a member firm. Still, even when using real-time data the reaction times from detecting abnormal risk situations to the decision point when stopping the DEA customer can be too long to avoid a negative impact on the intermediary. This is especially the case when algorithmic trading is involved. When implementing controls on a market level it needs to be ensured that risk prevention methods are not used for competitive reason, i.e., they are applied to all members equally, and latency is therefore equal. Markets are not assuming any responsibility for DEA customers as the intermediary has to take full responsibility.

Pre- and post-trade protection mechanisms must be applied in several layers:
1. Markets
- Markets should provide pre-trade limits that enable clearing firms to control the business of Direct Market Access (DMA) clients. In addition DMA firms would also be given pre-trade limits to control single machines
- Pre-trade limits on the level of the market have the advantage of zero latency
- Pure fat finger limits stop short; it is necessary to have in addition pre-trade limits that allow limitation of fast/algorithmic trading activity
- Finally order book limits will work as pre-trade limits which can be combined effectively with real-time post-trade position limits
- Post-trade markets should provide real-time risk data that enables clearing firms to control trading activity/positions in real-time
- Emergency buttons are needed

2. Intermediaries
- Should have pre-trade limits in place, where it is applicable
- Should have real-time post-trade limits

The following measures describe the procedures of Eurex Clearing and are suggested as possible standards to be provided by markets in the context of the consultation:

1. Event-Driven Risk Calculation:
The calculation of margin requirements should be on an event-driven basis. The recalculation process is driven by position updates. Every update of a position triggers a recalculation of the margin components and the cash balances of affected members. In addition, theoretical prices will be recalculated on an event driven basis, driven by significant underlying price moves.

2. New Broadcast, Inquiries and Reports:
Risk management relevant information is delivered over private broadcast stream via an interface upon subscription by the clearing member. Margin requirements and margin shortfall/ surplus information should be broadcasted to clearing members at 10-minute intervals.

3. Increased Frequency of Consolidated Information:
Information should be pushed to clearing members every 10 minutes. Risk management information tools should promote proactive intraday management of funding requirements, allowing a more efficient process and cost-effective risk and margin collateral management.

4. Pre-trade Risk Measures:
Traditional trading firms, routing their orders via the Clearing Member's order routing system, can be controlled by the Clearing Member's internal risk measures. "Pure DMA" firms are dependent on high-speed access to the exchange and thus utilize direct exchange access. Delays caused by pre-trade risk filters are unacceptable for them. A number of pre-trade validations for on-exchange trading can be utilized by the General Clearing Member (GCM) to control its Non-Clearing Members (NCMs). At the same time, the pre-trade validations should be designed in a way that they do not affect trading strategies and speed of NCMs. Simultaneously, NCMs may utilize limits to control the trader/ trader subgroups.

a) Maximum order quantities
Within the exchange limits given, the Clearing Member should be able to pre-define per NCM on a product level the maximum values for:

- Maximum order quantity on-exchange
- Maximum wholesale quantity
- Maximum calendar spread quantity

Using this functionality, the Clearing Member could effectively stop the NCM from trading certain products, by setting the quantities to zero. Within the limits set by the Clearing Member, the NCM could limit the maximum order quantities of its trader/ subgroups.

b) Order limits per time interval
The Clearing Member could set following limit parameters per member product, and account:

- Maximum number of orders/quotes (i.e. the system will count any add order, modify order, add quote transaction)
- Maximum number of lots (i.e. the accumulated quantity of all the above mentioned transaction types)
- Time threshold (in seconds)

Separate limits sets for different trading phases (e.g. fast market situations) should be foreseen.

In addition, the Clearing Member should be able to define per member a "Limit violation threshold" which defines how often a NCM is allowed to exceed a product-specific limit before the system will apply the below-mentioned trading restrictions (NCM can do the same for trader/subgroup).

Once the violation counter is exceeded for a specific product, the system will:

- Disable the NCM for further trading activities in this product
- Return an error message to the trader
- Send a real-time broadcast message to the GCM and NCM

The order interrupt for this product remains applicable until the Clearing Member releases it by setting new limits.

c) Working order limits
The Clearing Member could set the following parameters per member product, account, whereby the term "orders" refers to orders and quotes (NCM respectively trader/ subgroup).

Limit	**Options**	**Futures**
Volume	Total accumulated quantity of all buy and sell orders	
Delta Long	Total accumulated quantity of buy orders for calls + sell orders for puts	Total accumulated quantity of buy orders
Delta Short	Total accumulated quantity of buy orders for puts + sell orders for calls	Total accumulated quantity of sell orders
Vega Long	Total accumulated quantity of buy orders	n/a
Vega Short	Total accumulated quantity of sell orders	n/a

When a product specific limit is exceeded:

- The NCM (trader/subgroup) will not be allowed to enter or modify orders and quotes for this product
- Such transactions will be rejected until the respective counter value falls below a threshold value of a specified percentage of the exceeded limit

- A real-time broadcast message will be sent to the Clearing Member (CM) and NCM
- An error message will be returned to the trader

Once the risk measure has fallen below the threshold, order and quote entries will be possible again and a broadcast message will be sent out.

The measure of risk may fall because:
- orders/quotes are deleted or orders/quotes are matched or
- the limit is changed such that the current measure of risk is lower than a specified percentage of the new limit value

Separate limit sets for different market phases should be able to be entered.

Orders / quotes which result in exceeding the set pre-trade risk limit are not accepted and rejected completely. All attempts which lead to a value exceeding the set limit are counted and reported. Each attempt, exceeding the set limit is reported to the clearing members as well as non-clearing members. A warning system should apply (traffic light) for working order limits. Once the maximum violation counter is exceeded, the trading member, respectively trader subgroup is restricted from further trading-activity for a specific product / account combination.

Trading may be allowed again when:
- Working order limit: quantity is decreased below the threshold of the set limit
- Working order limit: quantity has been decreased by partial / full matches or order / quote deletions
- Working order and time interval limit: new limit defined by CM
- Working order and time interval limit: limit actively released by CM

When a new order / quote leads to an exceeding of the working order limit, but the existing booked order quantity is lower than the threshold, the transaction is rejected, but the violation counter is neither increased nor the member barred from engaging in further trading activity.

5. Stop-Button Functionality for Clearing Members:
Clearing Members can trigger a ´Stop` action on their NCMs reacting fast and efficient to emergency situations.

Triggering a ´Stop` action has the following implications for the affected member:
- All open orders and quotes will be deleted (except open orders and quotes for products which are currently in system state Freeze)
- The entry and modification of orders and quotes will be rejected
- Open OTC as well as give-up / take-up transactions will not be deleted, instead the counterparty will not be able to approve the pending transactions
- Trade and position adjustments will be rejected.

6. Stop-Button Functionality for NCMs:
Non-Clearing Members can trigger a ´Stop` action on specific traders and trader subgroups. The ´Stop` action will set all trading-related resources of the specific trader to zero for on-exchange orders and OTC-trades.

Triggering a ´Stop` action has the following implications for the affected trader(s):
- Entry and maintenance of orders and quotes will not be allowed
- Entry of block auction requests and quotes will not be allowed
- Entry of OTC transactions will not be allowed

The following action will not only be applied to the affected trader but to the whole trading subgroup: All open orders and quotes will be deleted (except open orders and quotes for products which are currently in system state Freeze).

C. Conclusion

Eurex Clearing AG welcomes the draft report and looks forward to reviewing the final report of the Technical Committee on Policies on Direct Electronic Access. We hope that you have found these comments useful and remain at your disposal for further discussion. If you have any questions please do not hesitate to contact:

Marcus Zickwolff
Head of Department, Eurex Trading and Clearing System Design
Eurex Clearing AG
e-mail:
Marcus.Zickwolff@eurexchange.com

Ingrid Vogel
Market Policy

Deutsche Börse AG
e-mail:
Ingrid.Vogel@deutsche-boerse.com

FIX PROTOCOL
INDUSTRY-DRIVEN MESSAGING STANDARD℠

May 20, 2009

Mr. Greg Tanzer
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

Re: Public Comment on Policies on Direct Electronic Access

Dr. Mr. Tanzer,

FIX Protocol Limited (FPL) would like to take the opportunity to provide feedback on IOSCO's Consultation Report entitled 'Policies on Direct Electronic Access'. FPL (www.fixprotocol.org) is a global not-for-profit industry association that owns and maintains the Financial Information eXchange ("FIX") Protocol which is a series of messaging specifications for the electronic communication of trade-related messages. FPL has approximately 200 member firms representing the major asset managers, broker dealers, Exchange/ATS/ECNs and vendors focused on electronic trading globally. The FIX Protocol is utilized by virtually every major stock exchange and investment bank as well as the world's largest mutual funds and money managers, and thousands of information technology providers and smaller investment firms across the globe. These market participants share a vision of a common, global language for the automated trading of financial instruments.

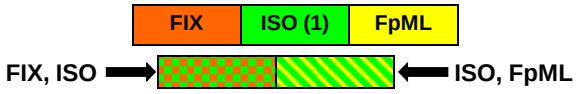
A suggestion was made in the IOSCO consultation paper in regards to possible enhancements to pre- and post-trade controls by markets permitting direct access and stated that 'several firms in various jurisdictions requested that a standardized format be utilized by the various exchanges when reporting Customer transactions.' FPL strongly supports this and would like to suggest that a standard legally binding agreement be put in place globally between the buy-side and sell-side for the use of DEA (the FIX community refers to this as DMA or Direct Market Access). This agreement would need to be agreed to by all exchanges, regulators, brokers and buy-sides globally. Obviously due to the great variance between markets this will be quite a task, however, FIX Protocol Ltd. would be pleased to work with IOSCO on developing this. We could leverage the expertise of our membership base to create a simplified version containing all of the necessary protections and addresses the risk management issues raised in the consultation paper.

Additionally, in Section B2 (Intermediary Perspective) of the consultation paper, there was a reference to the FIX Protocol which stated that in the written contractual agreements intermediaries have with their DEA Customers, one of the conditions is the 'use of a specific standard format for order routing such as SWIFT or FIX.' In this statement, SWIFT should be removed as order routing is a function covered by the FIX Protocol. We wish to inform you that FPL has been working with SWIFT and some of the world's leading financial market messaging standards organizations to create a financial messaging 'Investment Roadmap' (see below) which was publically released in May of last year. FPL, SWIFT, FpML / ISDA (Financial Products Markup Language / International Swaps and Derivatives Association) and ISITC (International Securities Association for Institutional Trade Communication) created the roadmap to provide market participants with a consistent and clear direction to messaging standards usage by visually mapping the industry standard protocols FIX, ISO, and FpML to the appropriate business processes across the major asset classes. This collaboration lays the groundwork for moving towards one common financial messaging standard data model, ISO 20022, while maintaining the existing independent protocols. The Investment Roadmap is publically available for download via the following link: www.fixprotocol.org/investmentroadmap.

FIX PROTOCOL
INDUSTRY-DRIVEN MESSAGING STANDARD℠

Investment Roadmap – FIX, ISO, FpML syntax

	Cash Equities & Fixed Income	Forex (2)	Listed Derivatives	OTC Derivatives (2)	Funds
Pre-Trade					
Trade					
Post-Trade					
Clearing/ Pre-Settlement					
Asset Servicing		N / A			
Settlement					
Pricing/ Risk/ Reporting					



(1) Represents ISO 20022, ISO 15022 and SWIFT MT messages
(2) See OTC Derivatives breakout for details:
- Syndicated Loans, Privately Negotiated FX, and OTC Equity, Interest Rate, Credit, and Commodity Derivatives
- FpML payload may be used in combination with FIX business processes in dealer to buy side communication

Following on from the above, the FIX Protocol is the *de facto* messaging standard enabling the communication of pre-trade and trade messages between financial institutions, primarily investment managers, broker dealers, ECNs and exchanges. We are also seeing increased adoption of the FIX Protocol by regulatory and oversight bodies. An enormous amount of data is transferred through the FIX Protocol and with over 10,000 firms utilizing it globally, we would like to work closely with IOSCO to satisfy any reporting requirements that may come out of this and ensure that the opportunity to leverage the FIX Protocol is taken into consideration with regards to any proposed solutions going forward.

We understand from our contacts on the Technical Committee that there will be a follow-up meeting to this consultation period in September in Madrid. We would welcome the opportunity for FPL to send representatives to engage with the Committee on DEA at that juncture. We further understand that the next area to be addressed by the Technical Committee is Dark Liquidity Venues and again we would like to offer FPL's expertise to engage with IOSCO's Committee in the development of the Consultation Report. Our membership represents the largest operators of Dark Pools globally.

We look forward to hearing from you.

Yours sincerely,

Scott Atwell, FPL Global Steering Committee Co-Chair

John Fildes, FPL Global Steering Committee Co-Chair

FINANCIAL SERVICES BOARD

Rigel Park 446 Rigel Avenue South Erasmusrand Pretoria 0181 South Africa
PO Box 35655 Menlo Park Pretoria 0102 South Africa
Tel +27 12 428 8000 **Fax** +27 12 347 0221 **E-mail** info@fsb.co.za
Toll free 0800 110443 **Internet** http://www.fsb.co.za

ENQUIRIES:	Mr N Muller	**D. DIALLING NO.:**	+27 12 428 8100
OUR REF:	14/11/4/3/7	**FAX:**	+27 12 347 1379
DATE:	21 May 2009	**E-MAIL:**	normanm@fsb.co.za

B EMAIL: DEAReport@iosco.org

Mr. Greg Tanzer
Secretary General
IOSCO
C/Oquendo 12
28006 Madrid
SPAIN

Dear Mr. Tanzer

COMMENTS ON THE TECHNICAL COMMITTEE'S CONSULTATION REPORT ON POLICIES ON DIRECT MARKET ACCESS

1. We wish to congratulate the Task Force on a comprehensive report that reflects the most important principles and pre-conditions for the effective introduction of direct market access.

2. We have perused the report of the IOSCO Technical Committee and wish to submit the following comments:

GENERAL CONTEXT

3. Our securities exchange, JSE Limited ("JSE"), operates four regulated markets, namely spot equities, equity derivatives, commodity derivatives and an interest rate market. However, our comments relate to mainly the equity market as the issues regarding Direct Electronic Access are most relevant in that market.

4. The JSE is a self-regulatory organisation and therefore the Securities Services Act, 2004 requires the JSE to formulate rules regarding transactions on the JSE, the financial resources of its members and the conduct of these members. Ultimately, the promotion of market integrity and adequate investor protection is achieved.

5. The JSE is required to monitor market activity, assess the systems, resources and controls being applied within the member firm as well as review the member's conduct.

6. Currently, the JSE does not allow Sponsored Access ("SA"). Therefore our comments should be considered in the context of what we may possibly consider as opposed to the actual policy that would be applied should we allow SA in the future.

7. The report defines Non-Intermediary Market-Members "where an entity that is not registered as an intermediary, such as a hedge fund or proprietary trading group, becomes a market-member, and in that capacity connects directly to the market's trade matching system using its own infrastructure and member ID". Only Market-Members are allowed to transact directly on the JSE's markets and connect directly to the trade matching systems and our comments are made in this context.

PRECONDITIONS FOR DIRECT ELECTRONIC ACCESS ("DEA") – MINIMUM CUSTOMER STANDARDS

8. The FSB agrees with this principle.

9. The exchange is responsible for all its member's clients' actions and we therefore do not believe it is necessary for a market to prescribe in its rules, the requirement that members should ensure DEA Customers have appropriate financial resources. This is inherent in the way how members evaluate client risk.

LEGALLY BINDING AGREEMENT

10. The FSB agrees with this principle.

11. However we are of the view that the responsibility for any client's actions rest with the member. It is therefore imperative that the member enters into a legally binding agreement with its client. Again, we do not believe it is necessary to prescribe this in the rules of the exchange.

12. The rules of the exchange are contractually binding on the exchange members and their clients. We do not believe it is necessary that the DEA customers should enter into a contractual relationship with the market as well.

SUB-DELEGATION

13. The exchange holds the member responsible for all the member's client's actions whether sub-delegated or not and therefore it would be better for the contractual responsibilities to be passed on, but we do not believe the exchange should prescribe this.

14. The rules of the exchange are contractually binding on its members and their clients. We therefore do not agree that the contractual relationship should be entered into with the market as well.

INFORMATION FLOW – CUSTOMER IDENTIFICATION

15. The FSB agrees with this principle.

16. The FSB also agrees that customer IDs should be allocated to DEA customers. This also allows the exchange to identify problematic DEA customers

and if necessary suspend these trader IDs without the whole member being affected.

17. In our equity market, members are required to register each DMA facility with the exchange and a trader identification number is used to identify orders being placed by each DMA facility.

PRE AND POST TRADE INFORMATION

18. The FSB agrees with this principle in so far as the provision of information relates to ensuring that the member has sufficient information on orders and executed trades to allow the member to manage his risk. In markets where there is assurance of settlement, there is no need to disclose counterparties to the trades to member firms.

19. It should also be up to the member and the client to agree on the designated person in the member firm who is to receive the pre and post trade information.

20. Our exchange has contractual settlement of trades in our equities market. Failure by a market participant to settle a transaction on settlement day results in immediate intervention by our exchange to ensure that settlement of the transaction isconcluded.

21. The combination of capital adequacy requirements and margining on uncommitted settlement positions allows the exchange to have effective oversight of settlement risk and the management thereof. The central accounting system utilised by all equities members ("the BDA system") provides transparency of trading information down to a client level on a real-time basis and provides the required information to members to manage their settlement risk.

ADEQUATE SYSTEMS AND CONTROLS – MARKETS

22. The FSB agrees with this principle.

23. Since the introduction of technologies to facilitate electronic order submission and DMA, the exchange has always tried to balance the interests of members with maintaining the integrity of an orderly market. The exchange currently prescribes in its rules minimum requirements for all electronic applications seeking to interact with the trade matching system.

INTERMEDIARIES

24. The FSB agrees with the principle that intermediaries should have in place both regulatory and financial controls as this is sound business practice. However, the FSB also recognizes the inherent difficulties that intermediaries may have in trying to implement certain controls in the pre-trade environment.

25. The FSB also agrees with the principle that intermediaries should have adequate operational and technical systems to manage their DEA systems. We would also extend this to personnel with relevant expertise and experience but it does not have to be internal and could be outsourced.

26. To ensure that members of the exchange promote market integrity and adequately manage their risk in conducting their trading activities, each member that wishes to implement an Order Entry Application ("OEA") that provides DMA to the member's clients for the equity market is required to meet certain criteria regarding the operation of such systems.

27. A member applying to operate an OEA in the equity market that provides DMA must be able to demonstrate to the satisfaction of the exchange that the OEA meets all of the following key objectives:

- **Avoidance of erroneous orders and manipulative practices:** The OEA must ensure that orders are not submitted to the equities trading system or left open in the trading system where such orders could result in erroneous trades, a false appearance of trading activity or an artificial price for a security.
- **Management of order limits and order types:** Adequate controls should be implemented to ensure that orders are within the normal trading patterns of the relevant clients. The OEA should also be able to limit the life of an order and be able to control each of the relevant order types.
- **Settlement Assurance:** The OEA must be able to verify, before submitting any orders to the equities trading system, the capacity of the client to settle trades resulting from orders processed via the application through the use of appropriate exposures limits for non-controlled clients and checks on availability of funds and securities for controlled clients.
- **Adherence to Trading Phases:** The OEA must be able to detect and react to the various exchange defined period schedules.
- **Maintenance of Audit Trails:** The OEA must be able to identify the source of all order details submitted to the exchange's equities trading system and must ensure and be able to evidence the maintenance of the integrity of the order details from the receipt thereof by the member to the submission of the order to the equities trading system.
- **Adherence to exchange rules and directives:** All orders submitted to the equities trading system by the OEA and the trades resulting from those orders must comply with the requirements of the exchange rules and directives.
- **Adherence to security and technical requirements:** The technical specifications of the OEA must comply with the exchange's users specification documentation and must ensure that the operation of the application will not adversely impact the operation of the market. Access to the application software must be strictly controlled to prevent undue manipulation.

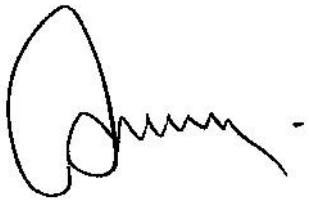
28. Our exchange is able to instruct a member to immediately discontinue using a member or client application or may restrict the usage by a member of any or all components of a member or client application. This action would be considered in circumstances where the exchange is of the view that the OEA is not meeting one or more of the key objectives set out above.

29. In utilising an OEA that facilitates DMA in the equity market, the measures that a member of an exchange would apply to assure settlement of transactions by controlled clients (member manages scrip & cash for the client) are materially different to those that would be applied in respect of transactions by non-controlled clients. For controlled clients the OEA should be able to confirm the availability of funds or securities, whereas for non-controlled clients the member would instead set credit or trading limits which would be maintained within the system.

30. The FSB believes that pre-trade controls should be at the members of the exchange and not at market-level. Pre-trade limits are not desirable in trade matching systems as these may hamper the performance of matching systems considerably.

31. In addition to the comments mentioned previously, we believe that it is important that a full audit trail exists within any DEA system to ensure that if the exchange or the regulator need to pursue a regulatory matter, that the information is available.

Yours sincerely



N Müller
Head: Capital Markets Department

Fortis Bank Nederland

Mr Greg Tanzer
IOSCO General Secretariat
C/Oquendo 12
28006 Madrid
Spain

Date 20 May 2009

Dear Mr Tanzer,

Public Comment on Policies on Direct Electronic Access

Fortis Bank Global Clearing N.V. London Branch

5 Aldermanbury Square
London
EC2V 7HR
Tel
+20 3 296 8000
Fax
+20 3 296 8800
www.fortis.nl

I am writing to comment on IOSCO's proposals for the future regulatory requirements on firms providing Direct Electronic Access ("DEA") to their clients on electronic markets.

Fortis Bank Global Clearing NV, and its associated companies in the Fortis Bank Nederland group (together "FBGC") are market leaders in the provision of DEA services to third party clients. Operating through seven offices globally, FBGC offers DEA to clients on markets as diverse as NYSE Euronext LIFFE, London Stock Exchange, ICE Futures, Eurex, Chicago Mercantile Exchange, Singapore Exchange and many others.

We have been providing DEA to our clients for more than twelve years, and during this time have seen phenomenal growth in trading volumes, market participants and trading complexity.

We are pleased to be able to comment on IOSCO's proposals, and hope that they provide a strong framework and a level playing field for the future.

Should you have any questions with regard to this submission, or wish for a more in-depth discussion, please do not hesitate to contact us.

Yours sincerely,

Paul Willis

Global Compliance Officer, Brokerage, Clearing and Custody

Please indicate in your comments whether they apply to AOR, SA, Direct Access by Non-Intermediary Market-Members, or to all three DEA pathways.

Unless specifically stated, as a general principle all of the FBGC responses below apply to all three DEA pathways, unless a response is not applicable due to a particular pathway due to the structure of the transaction flow.

B. Pre-conditions for DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

FBGC agrees that these qualifications are appropriate, and that they are those used in practice by FBGC. To elaborate on the specific requirements:

- FBGC sets the appropriate level of funding that a client is required to maintain in its account based on a combination of the products to be traded, the intended size of positions, and the type of trading strategy to be employed. Clients may meet these requirements by cash or collateral in forms that would be generally acceptable by clearing houses. This provides sufficient alignment with clearing house requirements to reduce the funding risk to FBGC.
- Familiarity with the rules of whatever markets are to be accessed is required from clients. If market-specific examination passes are required, FBGC insists that these are held. The client warrants in the FBGC Client Agreement that it possesses sufficient knowledge and experience to trade the desired markets and the client must maintain this knowledge by following market and regulatory developments.
- It is expected by FBGC of clients that they are familiar with the trading system to be used: clients will usually request a specific system from the several widely used in the market. If this can be provided, and it meets the technical and risk management requirements of FBGC, we will consider permitting the client to use it. The client would not, for example, be able to use a self-developed trading system without it being extensively tested by FBGC.
- As above, FBGC expects proficiency in use of the trading system. Specific training in NOT given by FBGC as we view that it is the client's responsibility to determine what and how they trade. However FBGC will ensure that the client is familiar with the functions required by FBGC, such as how to maintain filters and to withdraw orders in an emergency.

(2) Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

Do you agree? If not, please explain or elaborate.

FBGC views this as a fundamental requirement and it is applied without exception. No trading is permitted without a legally binding, validly executed contract with the client. This sets out, inter alia, the client's responsibilities for knowledge of and compliance with market rules, risk parameters and minimum account funding requirements.

Importantly it also states that in using a DEA system, the client is responsible for its own trading decisions, and receives no advice from FBGC and no opinion is expressed by FBGC whether trades are suitable and appropriate to the client's investment objectives. This does not seek to avoid responsibilities of FBGC but emphasises that the quid pro quo of DEA is that the intermediary cannot review or vet transactions (other than on market and credit risk parameters) before they are submitted to the market.

What are the key points to be addressed in such a contract? See section V.B (2) for possible elements that could be included.

FBGC agrees in principle with the contractual requirements described in this section. It recommends that there is not a prescription that all requirements must be contained in a single document, as certain elements such as risk limits or settlement details may change relatively frequently and are best dealt with by annex or side letter.

Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

FBGC does not believe that it is necessary for the DEA client to enter into a contractual relationship with the market in addition to its relationship with FBGC.

However, in practice, certain markets can and do require such a contract in the form of a registration agreement with the individual client trader, in order to receive a trading key or user ID to access the market. The contracts are usually in the nature of a registration form, and as a consequence of application usually makes the trader liable to the market for any misdemeanours committed on their user ID.

FBGC is ambivalent on whether market contracts should be required: they create an additional obligation and liability on the trader to encourage compliance with market rules and create the possibility for sanction; on the other hand they can create an additional level of administration that affects the client and FBGC.

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

FBGC believes that sub-delegation should be permitted, and that it is not necessary to for the sub-delegatee to enter into a separate contractual agreement with the intermediary. This reflects the established principle of an agent acting on behalf of an undisclosed principal.

The sub-delegation should in all cases be within the limits of the relevant regulatory framework, and any independent requirements for regulatory authorisation of the DEA Customer to handle the client business of the sub-delegatee are met.

C. Information Flow

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

FBGC does not expect to encounter any difficulties in identifying DEA clients. This is already required for regulatory purposes under existing rules and laws.

Sub-identifiers are used for individual DEA clients, and for individual traders of clients using DEA, in order to allocate executed trades to the correct client account.

Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

Yes. This is needed for operational reasons as well as for regulatory reasons, such as monitoring for wash trade rule breaches.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Do you agree with this proposed principle? If not, please explain.

Yes. Markets can provide significant assistance to member firms by the timely provision of information. In our opinion, the provision of timely pre-trade information is less relevant, as this data is generally available directly from the client's own DEA systems, should the member firm wish to take it. The latency issues of sending data over communications lines may also mean that pre-trade data actually arrives at the firm from the exchange after the order has been executed.

The provision of immediate post-trade data is much more valuable to firms as it enables real-time risk management on the basis of confirmed executions.

What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management?

In general terms, intermediaries need to receive the full data available regarding an order or trade that would be necessary for clearing and settling a trade. In systems terms it would be

easier for a firm to receive all data, and select the particular fields that it wishes to use depending on the particular checks that it wished to run.

What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

The receipt of all data fields related to an order or executed trade would be sufficient.

D. Adequate Systems and Controls

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Do you agree? If not, please explain.

Yes, but these pre-trade controls should be limited to ensure that they do not create latency in the execution of a trade once an order has been released to the market..

In practical terms, this means that the controls are limited to input controls to prevent "fat finger" errors in the setting of the order size or price parameters.

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

No. FBGC does not believe that it is appropriate, in all circumstances, to require such pre-trade controls. As stated above, we believe that the controls should be limited to input ("fat-finger") controls. Any controls that affect the latency of execution of orders, such as by calculating a "what if" scenario of position or credit limits on the whole client portfolio would introduce unacceptable delays to the submission of the order to the market.

Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

Yes, as explained above.

As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

FBGC believes that, from the position of an intermediary, the primary purpose of a pre- or post-trade control is to protect the financial position of the intermediary and by extension the solvency of its client. This is best served, for the minimisation of pre-trade order latency, by the use of immediate post-trade controls.

Should the market wish to impose additional control requirements, such as those required to implement prevention of wash trades prohibited by its rules through the execution of orders against those orders already sitting unexecuted in the market, we believe that these are best implemented by the market itself at exchange level. In this way a level playing field would be preserved across all market members, as latency (and hence a commercial competitive advantage) would not be differentiated merely by the willingness or not of intermediaries to implement effective controls on executions.

Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

As stated above, FBGC believes that, in broad terms, the role of risk management should be handled by the intermediary and that the role of ensuring market integrity, compliance with exchange trading rules and prevention of market abuse should lie with the market.

Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

Yes, in principle the controls applied should be execution-neutral in their application.

Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

In general, no. This response will vary in practice from market to market as some markets are more proactive at providing timely information to their members. As the intermediary does not see the order from an SA client before it is executed, the timely receipt of executed trade information is critical for effective risk management by the intermediary.

When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

No. In actual fact the risk from an NCM is greater than that from a DEA client. The reason for this increased risk is that the NCM will execute its trades on its own trading systems. A General Clearing Member will not have control over these systems and will be unable to enforce any pre-trade risk management controls within these systems.

The only control that the GCM can exercise in this scenario is the sanction of cancelling or suspending its clearing agreement with the exchange. This option is not one that would be taken lightly, and in practice is only invoked in the case of an NCM's default.

Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

No, in general terms a drop copy is for information purposes only.

Even if an intermediary received a copy of an order from the exchange, it would not be able to "intercept" an order to prevent its execution. Firstly this would be because it is assumed that if a drop copy is needed, it relates only to a Sponsored Access client that trades directly to the market without passing through the intermediary's systems. If this was not the case, the intermediary could block the order as it passed through its own system.

Secondly, even if the drop copy was provided, the latency introduced by the transmission and calculation of the order against risk parameters would mean that the instruction to stop the trade could not "catch up" and block the client's order before it was executed.

Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

No. In the opinion of FBGC the primary issue with latency is that the introduction of more rigorous pre-trade filters slows down the trade execution process and gives a commercial disadvantage to a firm that takes its regulatory obligations seriously.

Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

FBGC has set out its comments on the required systems and expectations of data and controls in its previous answer. We believe that it would be inappropriate to specify in exact detail the expectations to achieve effective management of DEA risks as this will, and does, vary from client to client, market to market, and trading strategy to trading strategy.

[ENDS]

Response from Fortis Clearing Singapore Pte Ltd

Besides the questions in the Consultation Paper, the company was asked to respond to the following:

- *For sponsored access, does your firm impose or require your customers to have pre-execution "fat finger" or error prevention filters? Provide examples of such filters.*
- *Do these filters reside within the customer's own trading system or elsewhere?*

These questions are covered in our other responses within the document below. In short, though we do require customers to have pre-execution checks on their OMS systems if we are offering them sponsored access.

VI. PROPOSED GUIDANCE AND CONSULTATIVE QUESTIONS

A. Introduction

It is the view of SC2 and SC3 that markets and intermediaries should have appropriate policies and procedures in place that seek to ensure that customers granted DEA will not pose undue risks to the market and the relevant intermediary.

In broad terms, with the increasing use of DEA, there is the potential, particularly if proper controls are not implemented, that a customer may intentionally or unintentionally cause a market disruption or engage in improper trading strategies that involve some elements of fraud or manipulation. Unauthorised access is also generally recognised as being a major concern in terms of market integrity and security.

SC2 and SC3 have identified the key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

(i) Pre-conditions for DEA
(ii) Information Flow
(iii) Adequate systems and controls

Based on the areas identified above, SC2 and SC3 sets forth the following elements that could support principles in the DEA area. SC2 and SC3 invite comments from industry and the public on these matters.

Please indicate in your comments whether they apply to automated order routing systems, sponsored access or direct access by non registrant/non intermediary market members, or all three:

B. Customer Pre-conditions for DEA:

(1). Minimum Customer Standards

POSSIBLE PRINCIPLE: Customers using DEA should be required to meet minimum standards, including:

- appropriate financial resources;
- familiarity with the rules of the market and ability to comply with the rules of the market;
- knowledge of the order entry system which the customer is permitted to utilize; and
- proficiency in the use of that system.

- QUESTION: Should IOSCO consider a principle regarding minimum customer standards, and if so, are these the appropriate qualifications for such DEA customers?

Yes there should be minimum requirements on customer standards. We believe these are covered by the existing requirements placed on us by the SFA and SGX relating to opening and the maintenance of accounts.

(2). Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.

- What are the key points to be addressed in such a contract? See section V.B(2) for possible elements that could be included.
- [SC2: Please consider a question regarding a contractual agreements between markets and sponsored access DEA customers]

Yes there should be a contract which highlights the minimum standards as per above.

Contractually there should be an agreement between the intermediary and the customer highlighting the use of their own OMS system and that they understand the relevant rules and obligations of the exchange. This should also highlight the limits and controls approved from the intermediary (i.e. for a proximity service under a customers name, the intermediary should be able to have access to their rack and systems should they need to). The actual technology used should not be highlighted in the contract as this is ever changing and in the most part, remains exclusive to the customer.

(3). Sub-delegation:

POSSIBLE PRINCIPLE: Where a customer of an intermediary is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the intermediary should seek to ensure that its contractual arrangements with its DEA customer allow it to identify the sub-delegatee if required by a market authority.

- What requirements should be applicable if a DEA customer is permitted to delegate its access privileges directly to another customer (sub-delegation)? For example, should the sub-delegated customer be required to enter into a contractual relationship with the intermediary, the DEA customer and/or the market? If yes, what areas should be covered by such a contract?

We think that there should be a contractual agreement between the DEA customer and the intermediary.
We would like to suggest the areas to cover in the agreement:

1. **section on sub-delegation**

- **DEA customer to seek intermediary's prior approval for sub-delegating its direct access privileges to the sub-delegatee or DEA customer to inform the intermediary promptly of any sub-delegating its direct access privileges to the sub-delegatee [for identification of the sub-delegatee];**
- **The intermediary reserves the right to obtain the KYC documentation of the sub-delegatee from the DEA customer; and**
- **Compliance with the relevant laws, regulations, rules and intermediary's requirements which the DEA customer needs to comply applies to the sub-delegatee.**

C. Information Flow

(1) Customer identification

POSSIBLE PRINCIPLE: Intermediaries should disclose promptly to market authorities upon request the identity of their DEA customers in order to facilitate market surveillance.

- Should this information be given only upon request or on a transaction basis?

Upon Request

- What problems, if any, do you have, in obtaining or delivering this information? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for DEA orders on a transaction basis? Other possible solutions?) Please explain.

We have this information already and we know which customers are DEA.

(1) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should be required to provide member firms with access to all pre and post trade information (on a real-time basis) necessary for intermediaries to implement

appropriate monitoring and risk management controls discussed below in section 3.

- Do you agree with this proposed principle? If no, please explain.

- Are intermediaries receiving sufficient information from markets regarding pending order flow from DEA customers? Please elaborate.

- What is the information that intermediaries deem necessary to receive on a pre- and post-trade basis to perform effective risk management controls? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to properly implement pre-trade controls?

- Is there any specific issue regarding the availability of the pre and post-trade that would deserve further consideration?

We don't believe it is necessary for intermediaries to receive pre-trade information for sponsored access clients (clients with by-pass privileges). The only way pre-trade information would be effective is if a price-trade filter were in place which would add latency. Clients who are granted sponsored access should be required to provide their clearer a satisfactory explanation of their internal pre-trade checks, the limits themselves as well as notification and logs of any limit changes. Acknowledgement of this should be evidenced in a signed document. From an intermediary perspective, we are of the belief that real-time post trade information is suffice to effectively manage these clients. For clients trading directly through our infrastructure pre-trade controls are in place and are effective.

We are receiving sufficient information from the Market to effectively monitor our clients real-time (post trade)

D.. Adequate Systems and Controls

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a customer from placing an order that exceeds existing position or credit limits on such a customer.

POSSIBLE PRINCIPLE: Intermediaries shall have adequate operational and technical systems to manage its DEA systems.

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying customer position and/or credit limits.

Pre-trade limits such as fat finger, max long etc are fine and can be done by Fortis or by the customer (would usually be part of their algo). Price filter controls we do not agree with as they pose an extra layer of risk on us, the customer and the exchange. We believe this should be done on a client and exchange level (i.e. if a stock is a certain price then an order way off that price should be busted).

- Do you believe any distinction needs to be drawn between automated pre-trade filters that merely apply a position limit on such a customer, as opposed to automated pre-trade filters that address the credit exposure for each customer, and stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors?

All of these things affect latency. Therefore if such filters are to be implemented then every client/ member must go through the same checks otherwise it is an unfair market place. Distinctions are already in place depending on which market they are trading, i.e. position limits are only done on the DT market.

- As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

Post-trade controls are used effectively and this is all part of due diligence on the customer. However, they can never be as effective as pre-trade controls due to the nature of OMS systems being used. Now thousands of orders can be sent to the market in a matter of seconds so I don't know how this could be effectively managed post trade.

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

As discussed above we believe it is both the customers, the intermediary and the market to impose pre-trade controls. This should be part of the algo used by the client, should be part of the controls of the intermediary (whether done at client level or contractually with client) and ultimately if a trade is way outside of the market then this should be busted at the exchange level to combat misleading trading. We would also suggest that on exchange level that there is a PULL button which allows the intermediary to pull all orders under their membership so they can monitor all trades going through. This level of pre-trade control at the exchange must provide consistency for all intermediaries. If this is not consistent then some intermediaries that use the pre-trade controls will be at a disadvantage to those that don't. All should go through the "risk layer" whether they are using the controls or not.

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non DEA business. And if so, in what way should they be different?

DEA customers have this level of control within their algo's and are required to sign a document stating this fact

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to sponsored access?

Yes

- When a non-clearing market-member places a trade, does the mere fact that the customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

The clearing firm that has the relationship with the market maker should have completed their own due diligence on the client before starting the relationship. Whether or not the exchange membership reduces the credit risk is up to the firms own credit risk policies.

- Can intermediaries who receive “drop copies” of their sponsored access customer’s orders stop the orders prior to execution? If not, what is the utility of such a tool?

"Drop copies" and pulling these orders depends on the exchange and what the functionality allows.

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem and a potential response.

Latency must be consistent to the exchange for all members.

6. Appendix I

SC2 used the following definitions:

“Direct Electronic Access (DEA)”: DEA refers to the process by which a person transmits orders on their own (i.e., without any handling or re-entry by another person) directly into the market’s trade matching system for execution.

"Participant" – a person that is granted access to the market to transmit orders using DEA, whether or not a licensed or registered intermediary.

“Person”: Use of the word “person” is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

“Sponsored Access”: – An electronic access arrangement under which an intermediary Participant permits a customer to transmit orders through its own system and gateway directly to the trading system or, less commonly, to send orders electronically to the trading system through a service bureau pursuant to an arrangement between the vendor and the intermediary Participant(s).

“Sponsored Access Person”: A Person who contracts with one or more Participants for Sponsored Access to the market.

“Market” refers to exchanges and alternative trading facilities.

SC3 used the following definitions:

“Access through intermediary or third party infrastructure”: An electronic access arrangement under which a customer of an intermediary (such as a broker or broker-dealer) is able to transmit orders to one or more markets’ order matching system for execution through the intermediary’s own infrastructure and gateway directly, or to send orders to the market through a service bureau’s IT infrastructure, pursuant to an arrangement between the vendor and the intermediary.

“Access without utilization of intermediary infrastructure”: This refers to the process by which a customer (such as a fund manager) of an intermediary (such as a broker or broker-dealer), transmits orders on their own (i.e., without any handling or re-entry by the intermediary),

directly into one or more markets' order matching system for execution. While the customer may be using the intermediary's "tag" number, or name, the order does not go through the intermediary's infrastructure (including the intermediary's order routing IT systems). Such direct access, without utilization of the intermediary's infrastructure, could be referred to as "back-door" access to the market.

"Customer" – a person that is granted access to the market to transmit orders using either access through an intermediary's infrastructure, or access without utilization of the intermediary's infrastructure, whether or not that person is a licensed or registered intermediary.

"Person": Use of the word "person" is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

"Market" refers to registered or licensed exchanges.

Futures Industry Association
2001 Pennsylvania Ave. NW
Suite 600
Washington, DC 20006-1823
202.466.5460
202.296.3184 fax
www.futuresindustry.org

FIA

May 26, 2009

By E-Mail (DEAReport@iosco.org)

Mr. Greg Tanzer
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

Re: Policies on Direct Electronic Access

Dear Mr. Tanzer:

The Futures Industry Association ("FIA")[1] is pleased to submit this letter in response to IOSCO's publication of the consultation report prepared by the Technical Committee in relation to policies on direct electronic access.

Minimum Customer Standards

Each U.S. futures commission merchant ("FCM") is a National Futures Association ("NFA") member and subject to NFA requirements regarding standards for supervision of the use of automated order-routing systems ("AORS"). The FIA is aware of and in agreement with the NFA comment letter on those standards and accordingly will focus most of our own comments on direct electronic access ("DEA").

FIA agrees that review of a Customer's financial resources is an appropriate element of an Intermediary's determination to provide DEA to that Customer. Many FCMs have developed

[1] FIA is a principal spokesman for the commodity futures and options industry. FIA's regular membership is comprised of approximately 30 of the largest futures commission merchants ("FCMs") in the United States. Among its associate members are representatives from virtually all other segments of the futures industry, both national and international. Reflecting the scope and diversity of its membership, FIA estimates that its members effect more than eighty percent of all customer transactions executed on United States contract markets.

robust risk management programs appropriate to the complexity and magnitude of their respective businesses. These programs may involve consideration of the full relationship with each DEA Customer including but not limited to review of all products and markets traded by the DEA Customer, the character of the trading throughout that relationship, any history of non-compliance with market requirements, sophistication of the DEA Customer staff, agreements in place between the entities and the rights included in those agreements as applicable to various aspects of the trading relationship, and the ability to monitor DEA Customer trade flow and intervene if necessary.

However, we believe that each market offering DEA is in the best position to provide the Customer with guidance regarding its rules applicable to the DEA Customer, to ensure knowledge of the market's order entry system, and determine the DEA Customer's proficiency in the use of the market's system.

Where a FCM's DEA Customer opens an omnibus account ("Omnibus Customer") and provides DEA to its own customers, the Intermediary typically has no information or contact with participants in the omnibus account and the Omnibus Customer should be responsible for minimum customer standards with regard to its own customers.

Legally Binding Agreement

The FIA supports the concept of a recorded, legally binding contract between the Intermediary and the DEA Customer, and agrees that the nature and detail should be appropriate to the nature of the services provided. FIA members tell us that some elements such as the ability to impose trading limits or restrictions, the right to liquidate positions and the ability to immediately terminate trading are generally concepts incorporated in such contracts. However key points to be included in contracts between Intermediaries and DEA Customers should be best practices and not mandated, due not only to the customized nature of trading relationships and interplay of contracts documenting such relationships across entities and products, but to ensure the Intermediaries have flexibility to address evolving markets and changes in the circumstances surrounding client relationships.

Sub-delegation

Where the DEA Customer is permitted to delegate its access privileges directly to another party, the DEA Customer should adhere to pre-conditions for DEA as would be done between the DEA Customer and Intermediary. Adding a layer of contractual relationships with the Intermediary, DEA Customer (or AOR Customer) and the market would unnecessarily complicate and slow the documentation process. Additionally, inserting the market into the client relationship would create an apparent conflict of interest by giving the market control over contract completion. FIA notes and does not oppose that Eurex US and ICE Futures currently require a bilateral agreement with each DEA Customer, and suggests that this may

be the model to follow. However, FIA would oppose mandatory tri-party agreements between exchanges, customers and Intermediaries.

Information Flow - Customer Identification

As with minimum customer standards, disclosure of DEA Customer identity relies on the Intermediary's direct relationship with the DEA Customer. Assigning each DEA Customer its own Customer ID or mnemonic would not necessarily clarify identity. In the case of an Omnibus Customer the ultimate owner of a position is not information available to the FCM. Similarly a "black box" trader that is DEA Customer may use different algorithms for specific customers, and may change that use at any time. It is not technologically feasible for an FCM to monitor which customers of a DEA Customer are included in the omnibus account without asking the DEA Customer, or which algorithm is used for what customer of the DEA Customer. In both cases we suggest that the FCM provide a DEA Customer contact to the regulator and facilitate direct communication between them.

Pre and Post-Trade Information

The FIA agrees that it is crucial for markets to provide member firms with tools to access pre and post-trade information on a real time basis. In September 2007 the FIA and Futures and Options Association initiated a study of risk controls in the futures industry which included review of direct market access procedures, and in the published study recommended policies and best practices across markets. An excerpt of those recommendations are attached to this letter for ease of reference and include specific functionality to be provided by markets, including pre-defined authorizations, ability to set limits, monitoring capability and intervention capability.

FIA regular members have developed robust risk management programs appropriate to the character and conduct of their respective businesses by using an array of risk management tools. Although pre-trade information does not necessarily translate into Intermediary ability to stop that particular trade, it does permit the intermediary to perform calculations and if necessary, stop or cancel subsequent trades. We appreciate that markets such as CME Group, ICE Futures and Eurex U.S. have increasingly offered such tools and strongly support their addition to the risk management toolbox available to Intermediaries.

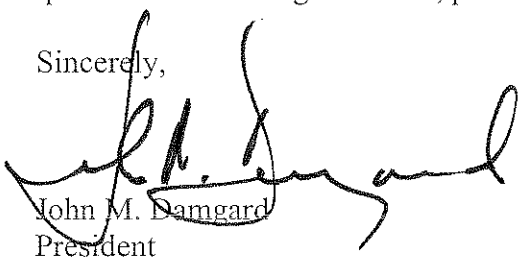
Adequate Systems and Controls - Intermediaries

As stated above, FCMs have developed complex risk management programs appropriate to the character and magnitude of their respective businesses. Flexibility to respond to changes in the character of business conducted as well as the size and complexity of the FCM itself are crucial to successful risk management. While pre and post-trade electronic controls and filters are important tools an FCM may use as part of its risk management program, the FIA believes the FCMs are best situated to determine appropriate risk management for their business. Accordingly, the FIA does not support any mandate of how an FCM implements its risk management in satisfaction of regulatory requirements.

Conclusion

FIA appreciates the opportunity to submit these comments on the report. If you have any questions concerning this letter, please contact me or Tammy Botsford at (202) 466-5460.

Sincerely,



John M. Damgard
President

Except from FIA-FOA Clearing Risk Study, Direct Market Access Standards for Exchanges

Recommended standards to ensure adequate controls and practices

Whilst it is recognized that exchanges' ability to offer functionality enabling controls, including pre-trading limits, over non-member client business may be limited by the extent to which such business is separately identified in their account structures, the following functionality is recommended to enable effective management of client risk.

(a) pre-defined authorizations

- trading capacity: functionality to limit trading by non-clearing members (each a "NCM") and non-member clients to specified instruments only (as reflected in their agreements with clearing firms).
- give-in/up capacity: functionality to limit give-ins/ups from NCMs and non-member clients specified by clearing firms.

(b) limits

- functionality to limit maximum order size by NCM and non-member client.
- functionality to limit net long/net short positions by NCM and non-member client on a daily basis.
- functionality to limit net long/net short positions in relation to open interest (at close on T-1) on a daily basis.
- functionality to establish pre-trading limits (vs. termination of trading on a post-trade basis).

(c) monitoring capability

- functionality to enable tracking of all working/open orders and give-ins/ups.
- functionality to enable tracking of all executed orders and give-ins/ups.
- capability to enable real-time or near to real-time tracking.

(d) intervention capability

- functionality to enable cancellation of all working/open orders by NCM and non-member clients.
- functionality to limit new order entry to position-reducing orders only.

Policies on Direct Electronic Access: CONSULTATION REPORT

Please indicate in your comments whether they apply to AOR, SA, Direct Access by Non-Intermediary Market-Members, or to all three DEA pathways.

GS (I) does not participate in Direct Access by Non-Intermediary Market- Members.
GS welcomes the chance to introduce harmonized industry standards to promote a level playing field in this commercially competitive area.

B. Pre-conditions for DEA:
(1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:
- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

o *Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.*

GS agrees that when considering a new customer, for any type of financial services business, a firm should have procedures for the on-boarding of such customers taking into consideration as a minimum their sophistication and financial resources. Specifically for AOR and Sponsored Access services customers should also be made aware of the existence of applicable rules and regulations for the business they will be conducting. This can be disclosed and evidenced in the Firm's terms of business. The responsibility for the education of customers can be shared by the market, GS suggests that the markets provide Sponsored Access customers online training modules, focused on ensuring their understanding of the rules and regulations of that market.

GS does not agree that knowledge of the order entry system and proficiency with that system should be a minimum standard in all cases. The reasons for this are two fold: first, GS will not necessarily be familiar with the order entry system that the customer is using and therefore not qualified to meaningfully confirm proficiency; and secondly it is very difficult to evidence such proficiency on an equal and equivalent basis given the multitude and diversity of such order entry systems.

GS disagrees with the view that such minimum customer standards will have meaningful impact in mitigating many of the financial and regulatory risks associated with DEA services.

(2) Legally Binding Agreement:
POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

o *Do you agree? If not, please explain or elaborate.*

o *What are the key points to be addressed in such a contract? See section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?*

GS agrees that a legally binding agreement should be in place for AOR and Sponsored Access services; further, it may well be the case that the relevant firm's existing general terms and conditions are already sufficient for this purpose. Such an agreement may include an explicit statement as to the customer's complete financial

liability for any and all orders that are executed via a Sponsored Access arrangement. Such an agreement could also include confirmation that all those permitted to enter orders understand the market rules and regulations, access granting guidelines, monitoring procedures, liability, escalation, confidentiality of information.

(3) Sub-delegation:
POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

- *What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?*

GS does not allow known sub-delegation of a GS customer's direct access privileges. However, GS customers may have arrangements in place to receive orders electronically from their underlying customers, which they may validate and then, route on to GS for execution. In such cases GS contractually faces its direct customers only, as it is they who are responsible for the validation and submission of all orders to GS irrespective of their source. GS would not want this relationship to be expanded in any way such that GS would be contractually related to its customer's underlying customer. In is also not clear how Principal 1 would be addressed in a sub delegate relationship.

For Sponsored Access services, GS may be supportive of a proposal whereby there is a tri-partite contractual relationship between the market, GS and GS' Sponsored Access customer, (again not including sub-delegation), which allowed the market to consider GS' customer directly responsible and liable to the market for any regulatory breaches. We understand the US based CME Exchange offers such a relationship.

C. Information Flow:
(1) Customer Identification
POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

- *What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.*
- *Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.*

GS has no objection to identifying their DEA customers in response to a case by case request from the market. This potential obligation to GS' regulators is already disclosed to all customers in the relevant firm's general terms and conditions.

GS rejects the suggestion that such customer identification should be done on an order by order basis by use of customer IDs or mnemonics. This would not only be extremely difficult and costly to implement into an existing infrastructure, but GS is not convinced that it will serve a meaningful purposes for market surveillance. Currently all AOR services are routed to markets without underlying customer identifications and the markets perform their surveillances at the firm level. GS does not believe that such a change would justify the cost and complexity of implementation to the intermediary. In addition, regulators may need to consider how their local regulations relating to confidentiality and anonymity interact with the idea that intermediaries should disclose (to a market in another jurisdiction) the identity of one of their DEA Customers.

(2) Pre and Post-Trade Information:

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

- *Do you agree with this proposed principle? If not, please explain.*
- *What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls*?

For AOR GS does not require such a principal as it currently has arrangements in place to receive appropriate pre and post market data for its risk management programme either from source or third party vendors.

For Sponsored Access GS believes it is most appropriate for the market to provide the regulatory pre trade controls on incoming orders given that they own both the interpretation of their regulations and are best placed to provide real time checks in a latency sensitive flow. This approach also allows for a level playing field across the market, (from a regulatory perspective) and makes fairer the competitive pressures, as correctly identified in your report, given that intermediaries will take differing approaches to the non prescriptive market regulations in the "race to the button". Additionally, if the burden of risk management is placed solely with the intermediary and the exchanges do not accept any responsibility it could introduce systemic risk (i.e. fat finger controls, order size controls) to the market given disproportionate amount of Sponsored Access flow in the market and potential differences in interpretations of unprescribed exchange rules by intermediaries with different compliance standards.

D. Adequate Systems and Controls:

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

- *Do you agree? If not, please explain.*

As per the above response, GS believes that either the market should provide pre trade checks to prevent breaches of its regulations, and/ or make their rules more prescriptive. Markets should stipulate a minimum standard of pre trade control and specify the exact nature and level of such controls, for example maximum percentage price deviation from last execution, minimum order size and maximum order value. These controls should be prescriptive such that all intermediaries operate on a level playing field and the market is protected.

GS should remain responsible for all financial risks vis a vis its customers.

(2) Intermediaries:

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

GS does not agree with this principal given that it is not possible to be aware of a customer's true position, given that many customers trade positions intra day and have multiple clearing and /or custodial relationships.

GS believes that responsibility for regulatory controls should be shared between market and intermediary as the rules are currently non prescriptive and open to broad interpretation including intermediaries who may well be prepared to take excessive regulatory risk in order to win more business. Further intermediaries should be allowed flexibility and diversity when accessing a customer's financial risk given that customers have multiple clearing and custodial relationships.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

- *Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.*

Please see comments above with regards to regulatory responsibility and market involvement/ prescriptive guidance.

- *Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?*

No.

- *As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?*

GS does not believe that post trade controls, even real time, are in any way a substitute for pre trade controls as the trade has been done by the time this controls identified it. Post trade controls (real time or otherwise) can compliment a pre trade control programme but cannot be effective alone. The absence of pre trade controls will allow potentially disruptive and distortive trading and increase the risk of mis-trades.

- *Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market? Please see responses above.*

GS believes the markets should take increased responsibility for regulatory controls. Customer risk management controls must be maintained by the intermediary.

- *Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.*

GS does not necessarily think that DEA and non DEA controls should be equivalent as they relate to very different businesses models with very different risks.

A large part of non DEA controls relies on the expertise of the intermediaries' trader who is trained and supervised to the intermediaries standards. The intermediary does not have this level of knowledge and oversight over the DEA customers and therefore a different set of controls is required.

- *Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?*

No – nothing is provided by the vast majority of markets and CCPs.

- *When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades*?

No.

- *Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool*?

No. GS believes the only use for this tool is a post trade monitoring, such as credit or position monitoring, which should complement pre trade controls but cannot replace them.

- *Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem*

Yes. Markets offering services such as co-location, and to a degree Sponsored Access, disadvantage other customers who use an AOR route which has increased latency. These types of arrangements raise questions of

fair and equal access for market participants. AOR provides a more effective access to the market, both for the intermediary, market and customers in general, from a financial and regulatory risk perspective.

- *Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit*.

GS considers the below as a minimum technological and operational standard for DEA service's financial and regulatory risk management. Many more logistical processes clearly must apply.

- Rules engine - pre-trade regulatory and risk management rules based on prescriptive guidance from markets/exchanges.
- Transaction tools to cancel/amend customer orders
- Exception monitoring to catch orders in a new, inactive or suspended state
- Aggregate client flow monitoring
- Order search tools to quickly find customer orders and identify status
- FIX monitoring - ability to monitor intermediary-customer and intermediary-market/exchange connections and any exceptions (such as rejected executions)
- Algorithmic monitoring - ensure algorithms behaving as expected and catch exceptions such as over participation,
- Fails + breaks monitoring

INVESTMENT COMPANY INSTITUTE

1401 H Street, NW, Washington, DC 20005-2148, USA
202/326-5800 www.ici.org

May 20, 2009

Mr. Greg Tanzer
Secretary General
IOSCO
C / Oquendo 12
28006 Madrid
Spain

Re: *Public Comment on Policies on Direct Electronic Access*

Dear Mr. Tanzer:

The Investment Company Institute[1] welcomes the opportunity to comment on the IOSCO consultation report on direct electronic access ("Consultation Report").[2] Institute members are significant investors in the global securities markets.[3] Efficient access to the markets is therefore critical to Institute members. To achieve the most efficient access, mutual funds often enter into direct electronic access ("DEA") arrangements. DEA arrangements provide investors with greater control over their trading decisions, can reduce execution times, and are a means to provide confidentiality to information about trades. For these reasons, Institute members have a keen interest in the principles issued by IOSCO regarding DEA arrangements.

We appreciate that IOSCO recognizes the importance of direct electronic access, and we support IOSCO's effort to issue principles aimed at protecting the integrity of financial markets. The Institute has been examining several issues relating to direct electronic access in conjunction with

[1] The Investment Company Institute is the national association of U.S. investment companies, including mutual funds, closed-end funds, exchange-traded funds (ETFs), and unit investment trusts (UITs). ICI seeks to encourage adherence to high ethical standards, promote public understanding, and otherwise advance the interests of funds, their shareholders, directors, and advisers. Members of ICI manage total assets of $9.71 trillion and serve over 93 million shareholders.

[2] IOSCO Consultation Report: Policies on Direct Electronic Access (February 2009). The Consultation Report can be found on IOSCO's website at http://www.iosco.org/library/pubdocs/pdf/IOSCOPD284.pdf.

[3] As of year-end 2008, registered investment companies held 27% of outstanding U.S. issued stock, 44% of outstanding commercial paper, 33% of tax-exempt debt, 9% of U.S. corporate bonds and 15% of U.S. Treasury and government agency debt. *See* 2009 Investment Company Fact Book, 49th Edition, p. 11-12. In addition, according to ICI data, mutual funds and ETFs held approximately $1.1 trillion of foreign stocks and bonds at year-end 2008.

proposals in the U.S. to reform the regulation of DEA arrangements. For example, earlier this year, the NASDAQ Stock Market ("Nasdaq") filed with the U.S. Securities and Exchange Commission ("SEC") a proposed rule change to modify the requirements for Nasdaq members that provide DEA to Nasdaq's execution system.[4] Nasdaq's proposed rules are intended to address concerns regarding oversight and risk management of DEA arrangements and, if adopted, are expected to serve as a model for regulations to be imposed by other U.S. securities exchanges. In examining the Nasdaq proposal, the Institute identified certain issues that could have unintended consequences for funds and other institutional investors. Many of these issues are applicable to certain of the principles delineated in the Consultation Report. As IOSCO further considers its principles on DEA arrangements, we urge it to consider these issues, which are discussed in further detail below.

Confidentiality of Investor Trading Information Should be Protected

We recognize the need for regulators and intermediaries to monitor orders and utilize information about trades to prevent market manipulation and abuse. In crafting regulations concerning DEA arrangements, however, regulators must be careful to protect the confidentiality of fund trading information. The confidentiality of this information is a critical issue to Institute members. Any leakage of this information can lead to frontrunning of a fund's trades, adversely impacting the price of the stock that the fund is buying or selling to the detriment of its shareholders.[5]

The Consultation Report contains several principles that raise concerns in this area. For example, the Consultation Report states that (1) markets should provide member firms with access to all pre- and post-trade information (on a real time basis) to enable these firms to implement appropriate monitoring and risk management controls, and (2) intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance.

The Institute believes that information regarding an investor's orders and trades that is disclosed must be limited to information that is relevant to specific risk concerns created by the particular DEA arrangement. Information that is not relevant to the DEA arrangement would not enhance the monitoring and risk management of these arrangements and could expose an investor's trading information to potential misuse. The scope and details of information that would be disclosed under the Consultation Report's principles is unclear.

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[4] Securities Exchange Act Release No. 59275 (January 22, 2009), 74 FR 5193 (January 29, 2009). The Nasdaq proposal is available on the SEC's website at http://www.sec.gov/rules/sro/nasdaq/2009/34-59275.pdf.

[5] The Institute has made this point to the SEC on several occasions. *See* Letters from Paul Schott Stevens, President and Chief Executive Officer, Investment Company Institute, to Christopher Cox, Chairman, Securities and Exchange Commission, dated September 14, 2005, August 29, 2006, and September 19, 2008.

In the U.S., the Nasdaq proposal would require agreements between the "sponsoring member" and "sponsored participant"[6] to contain certain contractual provisions, including that the sponsored participant would provide the sponsoring member with access to its books and records as well as complete and current corporate and financial information. We oppose these provisions as they do not limit the information provided to that which is relevant to the DEA arrangement and would expose funds to the risk of disclosure of sensitive information. We urge other regulators to refrain from imposing such provisions.

In order to mitigate the risks that arise when an investor shares information with an intermediary, we recommend that DEA regulations contain meaningful and enforceable confidentiality safeguards applicable to both intermediaries and any other recipients of the data (*e.g.,* exchanges). These safeguards should, at a minimum, require the recipients of the information to maintain the confidentiality of the information and to use it exclusively for regulatory purposes.

Regulations Should Provide Flexibility to DEA Arrangements

Numerous methods of direct electronic access exist and operate differently from one another. In adopting and implementing DEA regulations, we urge regulators to not take a "one size fits all" approach to the regulation of DEA arrangements. Instead, consideration should be given to factors such as the type of investor using the arrangement, the specific methods of DEA, and existing rules and regulations. Failure to give appropriate consideration to these factors could result in regulations that are unnecessary, burdensome and inflexible. Such regulations also could limit the ability of intermediaries to provide efficient and competitive DEA services to investors.

Impact of Requirements on Sponsoring Intermediaries and Exchanges Should be Considered

Prior to adopting any new or amended regulations regarding DEA arrangements on sponsoring intermediaries and exchanges, regulators should carefully consider any potential unintended consequences of the impact of these regulations on the end-user, the investor. For example, if these regulations are too onerous or costly for certain intermediaries, they may determine to not offer DEA arrangements, thereby reducing the number of available trading venues for investors and potentially negatively impacting best execution. Similarly, the cost of trading may be increased as intermediaries shift the burden of compliance with the requirements onto investors. We believe that providing intermediaries with flexibility to utilize existing risk management controls that they determine are the most effective should be considered and may best serve the interests of the securities market and investors.

* * * * *

[6] "Sponsoring member" and "sponsoring participant" are defined terms under the Nasdaq proposal.

We appreciate the opportunity to express our views on the Consultation Report and look forward to working with IOSCO as it continues to examine these issues. In the meantime, if you have any questions, please feel free to contact me directly at (202) 371-5408 or Eva Mykolenko at (202) 326-5837.

Sincerely,

/s/ Ari Burstein

Ari Burstein
Senior Counsel

cc: James Brigagliano, Acting Co-Director
Dan Gallagher, Acting Co-Director
Division of Trading and Markets
U.S. Securities and Exchange Commission

Richard G. Ketchum
Chairman & Chief Executive Officer
FINRA

London
Stock Exchange

20 May 2009

Mr. Greg Tanzer
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

10 Paternoster Square
London EC4M 7LS
T +44 (0)20 7797 1000
www.londonstockexchange.com

Sent by email: DEAReport@iosco.org

Public Comment on Policies on Direct Electronic Access

Dear Mr Tanzer,

The London Stock Exchange Group welcomes the opportunity to respond to IOSCO's consultation on Direct Electronic Access ("DEA"). This response is submitted on behalf of the London Stock Exchange ("the Exchange") and Borsa Italiana ("Borsa").

Overall we agree with IOSCO's possible principles and feel that market operators are best placed to develop and implement these principles in practice. We view new and varied ways to access markets as positive and believe that controls are key in ensuring that the market as a whole benefits from such developments. We believe however that it is important to recognise that some exchanges have already introduced rules and controls concerning DEA and that there are various valid ways to achieve the common objective of market orderliness. For example, the scope and level of responsibility of the exchange versus its member firms may vary in different jurisdictions. Our rulebooks set out rules on areas such as controls, but we give our member firms a degree of discretion in determining the details of the controls which they will implement for their DEA customers.

We would also highlight that it is important to appreciate the different nuances of the three types of DEA which are outlined in IOSCO's paper. We believe that it is necessary to formulate principles which are specific to each type of DEA.

The Exchange and Borsa offer Order Routing, which is similar to the concept of Automatic Order Routing ("AOR"), which is referred to throughout IOSCO's paper. The Exchange also offers Member Authorised Connection ("MAC"), which is similar to Sponsored Access ("SA"), however member firms must be able to control the MAC customer's order flow. For instance they must be

able to monitor and stop orders submitted by their MAC customers by arranging for a suitable control structure to be in place, even though the orders do not pass through their usual order management systems. The Exchange and Borsa allow Direct Access by Non-Intermediary Market Members, but we would classify these participants as member firms and not as DEA customers

Our responses, provided in detail in the attachment to this letter, reflect these distinctions.

I hope that our views are helpful to the IOSCO Technical Committee. Please do not hesitate to contact me should you wish to discuss any aspect of this letter.

Yours sincerely,

Adam Kinsley
Director of Regulation
London Stock Exchange

B. Pre-conditions for DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

o Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

We agree that the criteria listed above are matters which we would expect member firms to take into account when deciding if it would be appropriate to provide a customer with DEA.

Exchanges should have rules which emphasise the importance of effective due diligence on DEA customers (to be carried out by member firms) and the importance of appropriate training and education. It is also essential to require member firms to have control over their customers' orders. In relation to SA specifically, as this involves direct access by customers to exchanges' markets, exchanges may wish to have some rules in relation to customers' access. For instance, an exchange may wish to have a right of veto before a customer's connection is put in place (and the right to suspend or terminate it thereafter) where the exchange has reason to believe that there are issues that have not or could not have been identified by the member firm's due diligence.

However, we believe that member firms will need to retain some level of discretion with respect to the detailed criteria they want to require of their customers. In addition, we believe that member firms should be given full responsibility for determining minimum standards to be met by their DEA customers with respect to financial resources as this is primarily a business decision.

(2) Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

o Do you agree? If not, please explain or elaborate.
o What are the key points to be addressed in such a contract? *See* section V.B (2) for possible elements that could be included. Should SA

DEA Customers be required to enter into a contractual relationship with the market as well?

We agree with this principle, and in particular that a legally binding contract between the intermediary and its DEA Customer be put in place. This serves to protect both parties and would seem a prudent arrangement. However, member firms should be able to decide, with their customers, what form this contract should take and what provisions it should contain. For example member firms may wish to state that they will pass any losses to the customer that are associated with erroneous orders being entered at the customer. As member firms could be required by an exchange to terminate a DEA customer's connection, member firms may wish to consider including this in the contract too.

We do not think that it is necessary or appropriate for DEA customers to enter into a contract with the market. Provided the exchange's rules ensure that the member firm is responsible for all orders submitted under its trading codes, contracts between individual DEA customers and the market should not be necessary. Also, retaining a straightforward exchange-to-member, bilateral relationship ensures clarity of who is responsible for what.

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

o What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

We agree that a member firm should be able to request and obtain information on the identity of the sub-delegatee and be able to provide this to exchanges or the market authorities as required. However, as noted above, we do not consider that contracts between the sub-delegatee and the market are necessary or appropriate.

C. Information Flow

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

o What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (*e.g.,* the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.
o Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

We agree with this principle and require our member firms to provide us with accurate information in a timely manner about business and trades under their trading codes. We do not often encounter difficulty with member firms providing information on the identity of their customers.

If orders flow directly from the DEA customer to an exchange (e.g. SA) then we believe that it should be mandatory for these customers to use unique customer IDs to allow exchanges to identify their trading activity on an ongoing basis. In relation to AOR, we believe that customer identification on orders is not necessary and should be optional for the member firm. This is because all these orders pass through the member firm's usual order management systems. However, an exchange may wish to retain the right, as we do, to require a member firm to use a unique customer ID if it has concerns about the behaviour of the member firm's AOR customer.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

o Do you agree with this proposed principle? If not, please explain.
o What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

We agree that markets should provide member firms with access to all pre- and post trade information and believe that this information is vital if member firms are to have appropriate controls.

Member firms that provide SA or AOR are able to receive all real-time market data from us and we consider this to be important to help them implement controls. As pending order flow (i.e. orders which have not yet been entered into the system) is not public information we would not consider that this information should be made available to member firms. However, a member firm under whose codes an iceberg order is submitted would receive an order confirmation, just as it would for any other order.

For SA, it is essential that a member firm receives information on orders placed and trades executed in its name on a real time basis. In accordance with the spirit of IOSCO's proposed principle, we believe this information to be core to the sort of controls member firms will want to have in place. We organise the provision of such information through the sending of 'drop copy' messages to the member firm. For AOR, member firms receive order entry and trade confirmation information directly as the customer's orders are routed through the firm's usual order management systems.

D. Adequate Systems and Controls

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

- **Do you agree? If not, please explain.**

We agree with this principle. Exchanges should have rules that require member firms to have controls in place that are sufficiently robust in order to prevent errors, possible abuse or disorderly markets. However, as such controls need to be appropriate in light of the customer's order flow, trading strategies and volumes we consider that an exchange's rules should not be overly prescriptive in this respect, but principles based, such that member firms may set their controls in different ways for different customers. If an exchange becomes aware that a member firm's controls are insufficient, the exchange should have the ability to require the member firm to amend its controls as appropriate or to require that the DEA customers be disconnected.

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

We agree that such controls should be in place. It is our view, however, that a member firm should have the flexibility to determine which detailed controls are appropriate to manage its customer's position and credit limits due to its in-depth knowledge of its customer's business. Credit controls are evidently an issue for the member firm but order entry controls should be designed within parameters set by the exchange in question.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

o Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

We agree that such automated pre-trade filters are desirable and feasible. Indeed, they are essential in ensuring the orderly functioning of the market. As explained above, member firms are best placed to determine the precise detail of the pre-trade controls that they wish to have in place for their DEA customers' order flow.

o Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

We are unclear as to why a distinction should be drawn between pre-trade filters for position limits and credit limits, nevertheless we believe that such pre-trade filters are likely to be very important for member firms and that they should agree and manage them for their customers, given that the activity under a member firm's trading codes is its responsibility. However we believe that this is an issue for member firms to consider for themselves and that firms should manage the financial risk of their relationships with their customers as they see fit.

o As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

We believe that pre- and post-trade controls are *both* necessary. Whilst post trade filters should be used to monitor activity levels and for credit purposes they cannot entirely replace pre-trade controls in terms of maintaining an orderly market and preventing the submission of erroneous or potentially abusive orders. It is important that orders that could adversely affect the market are identified and prevented from reaching exchanges. Only pre-trade controls can do this.

o Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

We believe that pre-trade controls should be positioned at the intermediary level as member firms are best placed to determine which controls are most

appropriate for their customers' business. In terms of detailed controls, we do not consider it appropriate to be prescriptive given the broad spectrum of activity and trading volumes that different member firms and their customers generate. We view it as the responsibility of member firms to establish their own controls, taking into account the nature of their order flow, rather than relying on an exchange putting in place 'one-size-fits-all' controls. As a result, we recommend that exchanges provide member firms with broad guidance in this area with which they must comply when designing the details of their controls.

Nevertheless exchanges may wish to consider implementing additional control mechanisms, for example trading halts or Automatic Execution Suspensions (AESPs), if they do not already have them. Such mechanisms trigger suspensions of trading when there is a significant price movement in a security (the precise level depending on the security in question). The suspensions give the market time to react to significant price movements and we believe they complement the member firms' order entry controls.

o Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

Yes – clearly all orders submitted to the market should be subject to broadly similar controls. Controls are essential to the orderly functioning of the market and should be required for both DEA and non-DEA business. While trading venues may not need to be prescriptive about the specific controls that are necessary, we would expect controls between DEA and non-DEA firms to be broadly equivalent as we view all activity under a member firm's trading codes as being that firm's responsibility.

As stated above, control structures should be appropriate given the order flow generated by the DEA customers in question; but we believe that it is for member firms to decide the detail of the controls.

o Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

Yes – the Exchange has functionality built within its trading systems to assist member firms in this regard. We provide 'drop copy' functionality so that member firms are aware of the orders submitted and the trades executed under their codes by customers with direct technical access to the Exchange's markets. The Exchange also offers technical functionality so that the activity of member firms' MAC customers can be separately identified and, if necessary, their access to the markets suspended or terminated.

o When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

Possibly, but not necessarily. Market members will have met the exchange's criteria for membership and this may serve to provide clearing members with some comfort regarding credit risk. However, it is for the clearing firm to determine the risk posed by each entity whose trades it clears and we would not expect clearing firms to rely on membership as the sole criterion for providing credit. The fact that the customer is a market member does not necessarily reduce risk to the clearing member; however the fact that trades will be cleared by a clearing member does reduce the overall risk to the market.

o Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

This depends on the nature of the order in question. Where such orders are passive (i.e. do not execute immediately upon entry), the member firm receives a 'drop copy' of the order entry confirm and can delete the order. This is because a member firm can delete any resident order submitted under its trading codes. However, where the order submitted is aggressive it will execute immediately, and so deleting the order is clearly not possible. In this case, the 'drop copy' will be of the execution confirm.

We do not view the drop copy as the only mechanism through which erroneous and/or inappropriate orders can be identified and stopped by the member firm – this is primarily the function of pre-trade controls. The drop copy is also there to provide the member firm with an audit trail of all orders sent and trades executed in its name.

o Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

No, we do not believe this should be the case. There should be no systematic discrimination in any technology solutions provided to market participants by an exchange. Crucially, once within a trading system, all orders should be treated equally in terms of the speed with which they are handled by the system. However, latency levels in terms of access to trading systems are affected by a number of factors including the effectiveness of a member firm's own internal systems (and it may use a number for trading on an exchange), the speed of its connections to an exchange and, potentially, the physical distance between its data centre and the exchange's data centre. These are technical and/ or budgetary issues for each member firm to consider for itself. By extension, it is not practical for exchanges to ensure that all like classes of participants experience the same levels of latency or to inform such participants of the extent of firm-specific time lags.

o Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

Member firms should have the technical capability to halt a customer's order flow. In addition member firms should be able to utilise the 'drop copy' messages sent to them and to work with an exchange should the decision be taken to suspend or terminate a DEA customer's access to its markets. Member firms must also have appropriate controls built into the customer's connection to ensure compliance with the exchange's rules on controls etc around DEA business.

MANAGED FUNDS ASSOCIATION
The Voice of the Global Alternative Investment Industry
WASHINGTON, DC | NEW YORK

June 12, 2009

Via Electronic Mail: corina@iosco.org

Mr. Greg Tanzer
IOSCO General Secretariat
C/ Oquendo 12
28006 Madrid
Spain

Re: Public Comment on Policies on Direct Electronic Access

Dear Mr. Tanzer:

Managed Funds Association ("MFA")[1] welcomes the opportunity to provide comments to the Technical Committee of the International Organization of Securities Commissions ("IOSCO") on its Policies on Direct Electronic Access Consultation Report ("Consultation Report") as it determines whether it is appropriate to provide guidance regarding direct electronic access ("DEA").[2]

MFA members are active users of electronic trading services and provide liquidity to markets and contribute to pricing efficiency as DEA customers ("Customers"). MFA believes that DEA is an important trading alternative for its members, and appreciates the Technical Committee's fact-finding survey of DEA models and practices. As part of the Technical Committee's review, we believe the Technical Committee should issue its survey to DEA Customers in order for IOSCO to gain a complete picture on the use and risks of DEA. Our members offer a relevant perspective as DEA Customers and would appreciate the opportunity to respond to the Technical Committee's DEA survey to share their experience and perspective with the Technical Committee, along with markets ("Markets") and intermediaries that are market members ("Intermediaries"). Below, MFA provides comments to the Consultation Report.

I. INTRODUCTION

The Consultation Report sets forth and seeks comments on proposed principles with respect to DEA ("Proposed Guidance"), including pre-conditions for DEA, information flow and adequate systems and controls. The Consultation Report defines DEA as the following practices:

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[1] MFA is the voice of the global alternative investment industry. Its members are professionals in hedge funds, funds of funds and managed futures funds, as well as industry service providers. Established in 1991, MFA is the primary source of information for policy makers and the media and the leading advocate for sound business practices and industry growth. MFA members include the vast majority of the largest hedge fund groups in the world who manage a substantial portion of the approximately $1.5 trillion invested in absolute return strategies. MFA is headquartered in Washington, D.C., with an office in New York.

[2] Policies on Direct Electronic Access, IOSCO Consultation Report, February 2009, *available at:* http://www.iosco.org/library/pubdocs/pdf/IOSCOPD284.pdf.

- Automated order routing through intermediary's infrastructure ("AOR") – where an Intermediary permits its customer to transmit orders electronically to the Intermediary's infrastructure, where the order is in turn automatically transmitted for execution to a market under the Intermediary's market maker ID (mnemonic).

- Sponsored access ("SA") – where an Intermediary allows its customer to use its member ID to transmit orders for execution directly to the market without using the Intermediary's infrastructure.

- Direct access by non-intermediary market-members ("Direct Access") – where an entity that is not registered as an intermediary becomes a market-member, and in that capacity connects directly to the market's trade matching system using its own member ID (mnemonic) (*e.g.*, the Customer is the Market member).

Our members are AOR, SA and Direct Access Customers that trade in equity markets and futures and options markets. We appreciate the need for regulatory oversight and controls with respect to DEA and believe that Proposed Guidance should also incorporate investor protections. We believe a one-size-fits-all approach would overlook the important differentiating DEA features and relevant Market regulations and limitations. The equity markets and the futures and options markets have sufficiently different regulations that guidance relevant to one market may not be applicable to the other. Also, general guidelines do not recognize that the three types of practices defined as DEA are suited for Customers with different risk profiles and are supported by distinct sets of technical capabilities. We believe Markets with input from Intermediaries and Customers, should provide guidance with respect to each type of DEA practice. In our view, a single set of principles would be inadequate. Further, any guidance provided should not be so restrictive that it would inhibit the development of technical advances.

II. COMMENTS

MFA firmly supports that Markets and Intermediaries should have appropriate policies and procedures in place that seek to ensure that customers granted DEA will not pose undue risks to the Market and the relevant Intermediary. In addition, MFA believes that it is equally important for these policies and procedures to address confidentiality of Customer trade data to protect against market manipulation, fraud and even systemic risk. MFA believes a key component that is currently missing in the Proposed Guidance is a principle relating to confidentiality of trade data and any other proprietary information provided by a Customer pursuant to a DEA agreement (herein referred to as "Trade Data").[3]

A. Confidentiality Safeguards

MFA believes the Proposed Guidance should include a principle on confidentiality safeguards and controls to protect the Trade Data of Customers and to assure investors that the recipients of such information would use it exclusively for regulatory purposes. MFA supports

[3] *See* letter from Stuart J. Kaswell, Executive Vice President and General Counsel, Managed Funds Association to Elizabeth M. Murphy, Secretary, Securities and Exchange Commission, dated February 24, 2009, available at: http://www.managedfunds.org/downloads/MFA.Sponsored%20Access.2.24.09.final.pdf.

the premise that a Market or Intermediary should have access to necessary Customer information to allow them to comply with their regulatory requirements, including monitoring for potential illegal activity. We submit, however, that Markets and Intermediaries should have robust policies and procedures that include confidentiality safeguards and controls to protect a Customer's Trade Data, and that these obligations should be meaningful and enforceable by a Customer.

A Customer's trading data constitute highly proprietary information that, if made publicly available, could be used to reverse engineer trading strategies. Moreover, access to Trade Data could create opportunities for front-running, market manipulation, fraud and systemic risk through copycat strategies. We are particularly concerned with the potential risk that employees of a Market or of an Intermediary's proprietary trading division could access and misuse Trade Data to front-run a Customer's trades or to reverse engineer its trading strategy. Thus, we believe that the Proposed Guidance should recommend that Markets and Intermediaries implement and enforce confidentiality safeguards and controls, including information barriers, to protect a Customer's Trade Data.

Further, we believe the Proposed Guidance should provide that a Market only will use any information that it obtains exclusively for regulatory purposes and that the Market will maintain the confidentiality of such information. As Markets these days generally are for-profit entities, we are concerned that a Market may misuse Trade Data for business development purposes. The Proposed Guidance should recommend that a Market include certifications with respect to its confidentiality safeguards and controls, such as:

- The Market will use Trade Data exclusively for regulatory purposes and will not use it in any commercial way;

- The Market will make Trade Data available only to officers and employees who are responsible for regulatory functions, directors that are involved in regulatory functions (*e.g.,* an appeal of a disciplinary matter), or agents to the extent necessary to perform the regulatory function for which they have been hired; and

- The Market will implement and enforce policies and procedures, and maintain information barriers between its regulatory division and other business divisions.

To the last point, we believe that strict guidelines should be instituted by Markets, providing that Trade Data obtained through its regulatory function shall not be used for private, commercial gain. We submit that it is inappropriate for a Market, or any organization with regulatory responsibilities, to use Trade Data obtained through the auspices of its regulatory responsibilities for private, commercial purposes.

Accordingly, we recommend that the Proposed Guidance incorporate confidentiality safeguards with respect to a Market's possession and use of Customer Trade Data, including the certification by Markets of the maintenance and enforcement of policies, procedures and controls to protect Trade Data, and that Trade Data will be exclusively used for regulatory purposes.

B. Pre-conditions for DEA

MFA supports the principle that Customers should be required to meet minimum standards. As discussed in the Consultation Report, and experienced by our members, Intermediaries use a vetting process to determine on a case by case basis whether it will grant a customer DEA. We believe this process, which includes an analysis of the entire risk profile of a potential Customer, whether the potential Customer has adequate systems and controls to monitor orders and trades, and a review of the potential Customer's level of sophistication, is a critical component of DEA and greatly reduces market and credit risk from a Customer's use of DEA. The Consultation Report reports that in SA arrangements, some Markets restrict Customer access to certain types of institutional investors. We believe it is appropriate for the Customer standards for SA and Direct Access to be higher than for AOR.

The Consultation Report also proposes that there should be a recorded, legally binding contract between an Intermediary and its Customer, the nature and detail of which should be appropriate to the nature of the service provided. We concur with this principle. We believe that a contract between an Intermediary and its Customer serves the useful purpose of delineating the rights and responsibilities of the parties, as well as the terms of the DEA service agreement, such as trade limits, termination events, and grace and cure periods.

C. Information Flow, Systems and Controls

(1) Customer Identification

MFA supports the premise that a Market should have access to necessary Customer information to allow it to comply with its regulatory requirements. We agree with the Proposed Guidance that "Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance." Again, we expect Markets to treat Customer information provided by an Intermediary with an appropriate level of sensitivity and confidentiality.

(2) Latency and "Fairness"

Markets offer a number of pathways for members to connect to the trade matching system; each of which carries differences in response times due to differences in connection technology. The Consultation Report refers to the elapsed time between the transmission of a transaction from the Intermediary's system and the receipt of that transmission by the Market server for execution as "latency." Generally, SA and Direct Access Customers are high-speed, high-volume traders. For these market participants, including many hedge funds, their primary objective is to provide their investors, to whom they have a fiduciary duty, with the highest-quality execution possible at the least cost. In this respect, Customers are critically concerned with latency as delays can result in poor trade execution quality, increased costs to investors, as well as make it harder for the Customer to achieve its investment objectives.

We believe it is possible to reduce latency while enhancing regulatory compliance and oversight, and that the two objectives are not mutually exclusive. We believe latency should be addressed from both a regulatory and technical perspective. We submit that any regulatory requirements or guidelines concerning DEA should avoid creating competitive disadvantages for

Customers; consider the technical capability of Markets and Intermediaries; and ensure order transmission consistency within a Market and across Intermediaries.

(3) Pre and Post-Trade Information

MFA supports the use of risk controls to monitor a Customer's DEA trading activity, such as the performance of post-trade analysis by Intermediaries or Markets. Our members' primary concern with DEA order transmission is latency and its impact on best execution for their investors. This concern is elevated by the prospect of an Intermediary conducting pre-trade analysis. Intermediaries have varying technical capabilities, which affect the degree of latency and raise the risk of creating a competitive disadvantage for Customers. In addition, Customers are concerned with the increased risk that employees of an Intermediary could front-run a Customer's orders.

We believe there are ways to effectively implement oversight while minimizing latency concerns; and that a Market and Intermediaries should have flexibility in determining the appropriate method of regulation for each type of DEA depending upon their own regulatory and technical capabilities and legal requirements. We provide two recommendations with respect to pre-trade controls that would address both compliance and latency concerns.

> *(a) Markets should provide general principles with respect to "reasonable" pre-trade controls and allow (SA and Direct Access) Customers to build pre-trade controls into their own trading system.*

Given the regulatory and technical differences amongst the international market centers, and between the equity and the futures and options markets, we believe Markets, with input from Intermediaries and Customers, should provide general principles with respect to "reasonable" pre-trade controls. Customers should be allowed to build and develop "reasonable" pre-trade controls as established by the Market into their internal systems.

In considering risk management responsibilities, we believe it may be appropriate to analogize to the broker-dealer regime, where pursuant to Carrying Agreements such as former NYSE Rule 382 or Proposed Financial Industry Regulatory Association Rule 4311,[4] an introducing firm and a clearing firm must allocate responsibility amongst themselves to address certain basic regulatory functions. Similarly, in this context, we believe it may be appropriate for a Market to require that certain standard risk management controls be met and to leave it to an Intermediary and its SA or Direct Access Customer to legally agree both upon the procedures through which the Customer shall enact pre and post trade controls, and the manner by which the Customer will demonstrate such controls to the Intermediary's satisfaction. We believe the Customer should be able to demonstrate to its Intermediary that it enacts these controls obligations, such as through periodic reports or similar methods.

MFA members believe the opportunity to build and develop their own pre-trade controls would be preferable to requiring an Intermediary to conduct pre-trade analysis. Such solution would address regulatory concerns with respect to pre-trade controls, as well as address Customer

[4] Proposed Financial Industry Regulatory Association Rule 4311 (Carrying Agreements) can be found at: http://finra.complinet.com/en/display/display_main.html?rbid=2403&element_id=7370.

concerns with latency and the risk of their orders being front-run by employees of an Intermediary.

> *(b) A Market should conduct pre-trade analysis, either internally or in conjunction with a vendor.*

Alternatively, we believe a Market should conduct pre and post trade analyses. Having a Market conduct pre-trade analysis would limit Customers' concern with latency, because all orders would be subject to the same controls. Similarly, we believe a Market should be permitted to outsource the responsibility of conducting pre-trade controls to a vendor, so long as all orders to the Market pass through the vendor's pre-trade controls and provided that the Vendor is subject to the confidentiality safeguards discussed in Section II.A above. Such solution would alleviate Customer concerns regarding competitive disadvantages created by latency issues across Intermediaries and between Customers and Intermediaries. It would also assure Customers that they were obtaining best execution on behalf of their investors. Further, we believe a Market is likely to have greater ability and incentive than an Intermediary to maintain systems to process high-speed, high-volume trade orders.

* * * * *

Accordingly, we recommend that Markets provide general principles with respect to "reasonable" pre-trade controls and allow (SA and Direct Access) Customers to build pre-trade controls into their own trading systems. Alternatively, we recommend that a Market conduct pre-trade analysis, either internally or in conjunction with a vendor.

III. CONCLUSION

MFA appreciates the opportunity to share our views with respect to the Proposed Guidance on DEA. From the Customer's perspective, we believe that any Proposed Guidance on DEA would be incomplete without addressing Market and Intermediary confidentiality safeguards and controls to protect Customer Trade Data and to assure investors that the recipients of such information would use it exclusively for regulatory purposes. We believe Intermediaries should maintain minimum Customer standards for DEA service and should have adequate operational and technical systems to manage their DEA systems. We strongly believe, however, that there are a few ways to effectively implement risk oversight and that a Market and Intermediaries should have flexibility in determining the appropriate method of regulation for each type of DEA depending upon their own regulatory and technical capabilities and legal requirements.

(Continued on page 7.)

We would be happy to discuss our comments at greater length with the Technical Committee. If the Technical Committee has questions or comments, please do not hesitate to call Jennifer Han or the undersigned at (202) 367-1140.

Respectfully submitted,

/s/ Stuart J. Kaswell

Stuart J. Kaswell
Executive Vice President, Managing Director & General Counsel

/s/ John G. Gaine

John G. Gaine
President Emeritus and Special Counsel, International Affairs

CC: Ms. Jacqueline Mesa, Director
Office of International Affairs, CFTC
Mr. Ananda K. Radhakrishnan, Director
Division of Clearing and Intermediary Oversight, CFTC
Mr. James Brigagliano, Acting Co-Director
Division of Trading and Markets, SEC
Mr. Ethiopis Tafara, Director,
Office of International Affairs, SEC

TCSC2 and TCSC3 have identified three key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

.(i) Pre-conditions for DEA
.(ii) Information Flow

(iii) Adequate systems and controls

For each of these elements, TCSC2 and TCSC3 have identified possible principles that would provide guidance in the DEA area. The Technical Committee invites comments from industry and the general public on these possible principles or on any other aspect of this Report.

MCX Comments:- In India law does not permit the Direct Access by Non-Intermediary Market-Members, thus the scope of response is excluding the same. In view of the inherent risks involved in this kind of direct access, we encourage participation of intermediaries in the process.

Please indicate in your comments whether they apply to AOR, SA, Direct Access by Non-Intermediary Market-Members, or to all three DEA pathways.

B. Pre-conditions for DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

  - Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

MCX Comments:-
In addition to the above macro level standards, which are to be decided by the market, we propose that:
Intermediaries may define their own policies around differential rights based on customer classification. DEA Customer classification may be spanned across their risk profiles, regulatory track record, expertise/domain knowledge etc.

(2) Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.
- What are the key points to be addressed in such a contract? *See* section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

***MCX Comments**:- Market need not be party to the agreement since the intermediaries would be having a contractual agreement with all its DEA customers, and thus ensuring regulatory control. Clauses as mentioned in above mentioned section V.B (2) should be prescribed by the markets and used by the intermediaries for suitably drafting their contract with the DEA customer.*

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

- What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

***MCX Comments**:- DEA customer should be permitted to delegate its access privileges to the entities permitted by the markets. The intermediaries would responsible for the commissions & omissions of delegatees/sub-delegatees. Therefore intermediaries must enter into a contractual relationship with the delegatee/sub-delegatee. The areas could include the compliance with market regulations and dispute resolution. Markets need not enter into a contractual relationship with delegatee/sub-delegatee, since the relationship will flow through the market regulations.*

C. Information Flow

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

- What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (*e.g.*, the use

of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

- Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

MCX Comments *:- It is recommended that the DEA customer could have their unique customer ID which would form part of the order attributes flowing into the market. The unique ID would be common across the intermediaries for a particular market.*

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre-and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

- Do you agree with this proposed principle? If not, please explain.

- What information do intermediaries need to receive on a pre-and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

MCX Comments:- *We agree. All order & trade attributes should be provided.*

D. Adequate Systems and Controls

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

- Do you agree? If not, please explain.

MCX Comments:- *We agree.*

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

MCX Comments:- *Pre trade filters are desirable to ensure healthy & safe market practices. With sophisticated technology being easily available pre trade filters are feasible.*

In addition to the suggested pre trade filters, we may also look at filters on price/quantity ranges.

- Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

MCX Comments:- *Each intermediary may define the same as per their risk management policy.*

- As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

MCX Comments *: Pre trade filters are ideal for market integrity and thus filters such as price ranges, value limits could be beneficial as pre trade filters. Filters such as positions limits, credit risk, which ensure risk management, may be seen as more feasible as post trade filters in context of cost involved, capacity constraints etc.*

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

MCX Comments *:- Pre-trade filters for DEA customers need to be placed at intermediary level only, since market level filters pre & post trade are available for all customers.*

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

MCX Comments*:- Since the DEA customer has a seamless access to the market, the systems and control procedures to be followed by the DEA customer could be more stringent than a non-DEA customer.*

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

MCX Comments:- *Currently, such a concept does not exist in India.*

- When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

MCX Comments:- *The rules / laws governing the market-member across various jurisdictions differ and thus risk assessment would be required to be done accordingly .*

- Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

MCX Comments:- *'Drop Copy' enables the intermediary to assess the orders of the SA DEA customer and if required take suitable action.*

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

MCX Comments:- *The differences in latency can be addressed only by means of disclosure and equitable access.*

- Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

MCX Comments :- *Intermediaries should have the minimum operational and technical systems which ensures:*

- *Complete trail of all the transactions affected through the DEA must be available with DEA customer/Intermediary. In case the trail of the transactions is available only with the DEA customer, the same must be provided to intermediary as and when required*
- *Necessary real-time alerts, views and reports related to all the transactions affected through the DEA*
- *Facility to stop the DEA system immediately if need arise*

-----Original Message-----
From: K.Hirao<Mizuho>
Sent: Wednesday, May 20, 2009 10:05 AM
To: Corina Martinez
Subject: Policies on Direct Electronic Access.

Dear Mr. Greg Tanzer,
IOSCO General Secretariat

This is the message from Mizuho Securites Co., Ltd., a member of Mizuho Financial Group, Japan.
Please be submitted the following comments from us for "Public Comment on Policies on Direct Electronic Access."
Regards,

--comments from
here----------

Overall things,
*In Japan, only licensed brokers have access to the exchange.
Therefore, our comments below apply to Automated Order Routing (AOR) and Sponsored Access (SA) flow, unless stated otherwise.

Onto B (1),
*It is difficult to assess whether clients have sufficient technical knowledge and experience to handle their electronic trading systems. The way clients use their own trading systems is not information that is made public to brokers, and responsibility for knowing how to transmit orders electronically lies solely with the user.
Onto B(2),
*We agree. Similarly to ISDA, IOSCO would recommend a basic agreement format to authorities in each country.
*The main items would include
1) limitation of liability or indemnity in case of system outages;
2) information disclosure, when requests are made by authorities;
3) governing laws / courts of jurisdiction;
4) trading limits;
5) fixed conditions for acceptance of new orders / amendments to orders / cancellation of orders;
6) market access;
7) compliance rules; and
8) the terms of the agreement .
Onto C(1),
*There may be a variety of opinions from clients. If clients who wish to purchase Japanese equities are required to obtain a Foreign Investor ID
(FII) to trade in Japan, as is the case in Korea and Taiwan, investors may find the Japanese market more restricted than the US and UK markets. This may lead to investors underweighting the Japanese market. We think the rules in Japan should be in line with those in key markets such as US and UK, so that the Japanese market can maintain its competitiveness.
Onto C(2),
*Yes, we are in agreement that the Exchange should provide appropriate, relevant trade information. Historical trade price and order queuing information provided by the Exchange can be instrumental in dealing with claims by clients, and can provide accuracy and timeliness in resolving such claims. This kind of information can also be used to detect potential defects in systems. Onto D(1), *We agree.

Onto D(2),
*The pre-trade validations for individual orders to prevent trading errors should include trading volume, outstanding shares and stock prices.

*Both licensed brokers and the exchange should validate orders. Considering the impact an erroneous trade may have on the market, we think the general validation should be at the exchange level, in case the broker is facing technical issues on their side.
*If the purpose of pre-trade and post-trade order management is to prevent trading errors, we believe this should be applied to other business fields besides DEA.
*We do not expect credit risk to decrease.
*It is possible to install pre-trade filtering on SA clients' systems.
*1) It is necessary to have a centralized system in place that monitors and manages large volumes of electronic orders
2) It is necessary to have a system in place with automatic validation features
3) It is necessary to have a shared OMS for salespeople, sales traders, and client service desks to monitor clients' electronic orders. In the event of an OMS failure, it is very important to have control over line handlers so that immediate action can be put into effect, directly with the exchange when necessary, such as cancellation of an order. It is also imperative that there be a backup business continuity plan in case there is a system failure.

--end of
comments----------

*****
Mizuho Securities Co., Ltd.
Kenichiro HIRAO
Joint General Manager
Global Markets Planning Dept

As for Mizuho Financial Group, please visit the site:
http://www.mizuho-fg.co.jp/english/
As for Mizuho Securities, please visit the site:
http://www.mizuho-sc.com/english/

NATIONAL FUTURES ASSOCIATION

May 19, 2009

By E-Mail (DEAReport@iosco.org)

Mr. Greg Tanzer
Secretary General
IOSCO
C / Oquendo 12
28006 Madrid
Spain

Re: Public Comment on Policies on Direct Electronic Access

Dear Mr. Tanzer:

National Futures Association (NFA) appreciates the opportunity to comment on the IOSCO Technical Committee's Consultation Report on Policies on Direct Electronic Access. NFA is a registered futures association under the U.S. Commodity Exchange Act and an affiliate member of IOSCO. NFA is the industry-wide self-regulatory body for the U.S. futures industry and regulates the activities of approximately 4,000 member firms and over 50,000 registered account executives who work for those firms. Since NFA regulates intermediaries and not exchanges, our comments will be limited to what the Consultation Report refers to as "intermediated direct access."

NFA Members must already comply with the standards articulated in the Consultation Report. In 2002, NFA adopted an Interpretive Notice that addresses intermediaries' responsibilities for the two types of access that the Consultation Report refers to as "intermediated direct access."[1] The Interpretive Notice sets out a general standard in each of three areas: 1) security, 2) capacity, and 3) credit and risk-management controls. Each general standard is then followed by more detailed guidance on how to comply with it.

The general standard for credit and risk-management controls states: "Members who accept orders must adopt and enforce written procedures reasonably designed to prevent customers from entering into trades that create undue financial risks for the Member or the Member's other customers." The Notice calls for Members

[1] Compliance Rule 2-9: Supervision of the Use of Automated Order-Routing Systems, NFA Manual ¶ 9046.

to use pre-execution controls in most cases, although it does allow firms to use post-execution controls in lieu of pre-execution controls in some instances. The Member must, however, monitor the trading promptly post-execution.

Most importantly, NFA's Interpretive Notice requires Members to evaluate the customer's sophistication, credit-worthiness, objectives, and trading practices and strategies when deciding what levels to use when setting controls and whether to allow customers to use what the Consultation Report refers to as sponsored access. Although no intermediary can anticipate and prevent every financial risk resulting from direct access, any Member that does not take reasonable steps to avoid those risks violates NFA requirements.

The Consultation Report's possible principles for intermediaries are consistent with NFA's Interpretive Notice, and we support them. We make no comment on those principles that are directed to markets, as we defer to the expertise of those markets and the authorities that regulate them.

Two additional comments are in order. First, regulators MUST be able to determine who has placed a particular trade. This means an intermediary must be able to identify the trader and report that information to the appropriate market or regulator. While we do not encourage sub-delegation, at the very least the customer must be required to identify the sub-delegatee to the intermediary upon request, and both the customer and the sub-delegatee must be legally responsible for that individual's actions.

Second, while we agree in general with the first possible principle under D(2), we recognize that pre-execution controls should not be applied indiscriminately and, in rare instances, may actually be counterproductive. This could occur, for example, where a customer's transactions are part of a broader risk-management strategy. Therefore, we believe that the principle should be flexible enough to allow some exceptions. The intermediary should, however, be required to evaluate the customer's sophistication, credit-worthiness, objectives, and trading practices and strategies before deciding against pre-execution controls.

If you have any questions concerning this letter, please contact me at kwuertz@nfa.futures.org.

Respectfully submitted,

Karen K. Wuertz
Senior Vice President,
Strategic Planning & Communications

(kpc/CommentLetters/Electronic Access)

NATIXIS SECURITIES

Mr. Greg TANZER
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

COMPLIANCE DEPARTMENT

Références : Nsec-Conformité-2009-05-013 Paris, 20th of may, 2009

Subject : **Public Comment on Policies on Direct Electronic Access**

Dear Sir,

NATIXIS SECURITIES is the subsidiary of NATIXIS working on the midcaps segment, the drawing of market scenarios for the equity markets. This investment firm is included in an extensive banking network spanning 68 countries and a 22,000-strong workforce, NATIXIS, which assists its clients and partners throughout the duration of their project worldwide by designing the best banking and financial solutions. NATIXIS is a listed subsidiary of two major banking groups – Caisse d'Epargne and Banque Populaire – each of which owns more than 35.6% of the capital. With a rebalanced activity portfolio tailored to the new environment, NATIXIS possesses proven skills and front-ranking positions in France and abroad.

At first, we would like to thank you for this opportunity to comment the proposals IOSCO made about the Electronic Direct Access.

The objective of our document is clearly to support any point of the comments made by AMAFI, the French Association of brokers & dealers, in its reply dated May 6th 2009 "**IOSCO Consultation Report policies ON Direct Electronic Access – Comments by AMAFI**".

We would especially like to point the fact that it seems very important to amend the definition of DEA. As indicated by the AMAFI in **point 6**: *"the issues raised by "Direct Access by Non-Intermediary Market-Members" are very different from those raised by "Automated Order Routing Through Intermediary's Infrastructure" (AOR) or "Sponsored Access" (SA). In the first situation, the market member which is not registered as an intermediary has the same obligations than another market member. It is true, as mentioned in the report, that a non registered intermediary has to enter a clearing arrangement with a General Clearing Member (GCM) but the situation is the same for a registered intermediary who is not a clearing member".*

As a matter of fact, we also support the solution raises by AMAFI (**point 7**) concerning *"the Technical Committee that should reconsider the "Report" by defining DEA only in the case of AOR and SA and by focusing on the relationship between the trading member and its customers".*

Besides NATIXIS SECURITIES is totally in the same direction as the AMAFI on the fact that Sponsored Access raises specific issues (**point 8**): *"AMAFI considers that the rules governing SA should be at the same level as the rules governing AOR. In particular, pre trade filters should be put in place by the market members and/or the markets even if it is at the expense of latency. Being too flexible in this area could create risks for the market integrity and for the broker which offers SA. In theory, a broker should never accept to provide a customer with SA without a sound an reliable risk management tool, but in practice, commercial pressures could lead some brokers to take more risks at the expense of the market integrity and of there competitors".*

Thus, we wish to strongly emphasize the difficulties faced by the intermediaries, and especially NATIXIS SECURITIES, in the implementation of a potential pre-trade model.

In its **point 14**, AMAFI agrees with the principle of providing member firms with access to all pre and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

NATIXIS SECURITIES supports the AMAFI's comment: *"it must be pointed out that concerning AOR arrangements, the responsible intermediary still has the information from the markets. The needs are the same for AOR DEA than for other types of orders managed by the firm. The Principle should focus on SA arrangements which should only be possible if the intermediary has a view of pre-trade information in order to be able to stop the orders."*

Yours faithfully,

Mathias AUGUY
Head of Compliance

The Pulse of Finance

Newedge

BY EMAIL AND OVERNIGHT MAIL

19 May 2009

Mr. Greg Tanzer
IOSCO General Secretariat
C / Oquendo 12
28006 Madrid
Spain

Re: Public Comment on Policies on Direct Electronic Access

Dear Mr. Tanzer:

It is with great humbleness that Newedge Group ("Newedge") submits this comment letter in response to questions posed by the Technical Committee of the International Organization of Securities Commissions ("IOSCO") as part of its report "Policies on Direct Electronic Access" (the "Report") dated February 2009. First, we applaud IOSCO's outreach to the industry on this important topic. IOSCO's status as a truly international regulatory organization makes it uniquely positioned to address the concerns raised by this global issue. Indeed, more than ever, customers and intermediaries are accessing markets electronically, and doing so across jurisdictional borders. Consequently, I believe we speak on behalf of most of our colleagues, peers and competitors in saying thank you for taking the time to address this important topic.

We also believe, however, that as international regulators through IOSCO consider how to address the continued proliferation of direct electronic access to exchanges and other markets, it is important to consider that, with rare exception, current practices have generally proven sufficiently robust to have avoided any material adverse systemic issues. Indeed, exchanges and other markets (collectively "Markets"), intermediaries, customers, and vendors have worked together to create a global infrastructure and practices that, in general, have reasonably addressed the legitimate concerns of all participants – from the desire of direct electronic access ("DEA") customers to access as many as markets as possible with the lowest possible latency, to the desire of intermediaries to ensure they can adequately monitor and control the risks to which they are potentially exposed by the trading of their customers, to the desire of Markets to attract business while ensuring market integrity. There is little doubt that practices can be improved, but we believe this should not be done through the proliferation of detailed rules that may or may not be applicable to certain businesses, jurisdictions or activities, but through the articulation of broad principles framed, ideally, as so-called "best practices."[1] Stated another way, Markets, intermediaries and customers should be given the flexibility they need to promulgate DEA policies and procedures that adhere to general industry guidelines but that also make sense in the context of their particular business activities.

As background, Newedge is one of the largest global brokerage organizations offering its customers clearing and execution facilities, including DEA, across multiple asset classes including futures, securities (fixed income and equity), options, FX and various OTC instruments. "Newedge" refers to Newedge Group, a 50%-50% joint venture between Calyon (part of Credit Agricole) and Société Générale, headquartered in Paris, France, and all of its worldwide branches, subsidiaries and other units. Newedge maintains offices in over 15 countries and is a member of over 80 exchanges worldwide. Newedge estimates that its customers – who are principally

[1] See, e.g., SIFMA Comment Letter on Nasdaq DMA Proposal, dated February 26, 2009 ("Thus, as the electronic trading business has progressed in response to client demands, member firms, for their own protection, have voluntarily developed, individually and through SIFMA, various contractual and systemic means that also serve the end of market integrity. While firms acknowledge that perhaps these protocols and tools are not perfect, and that practices among industry participants do vary, they want to emphasize that the market on its own, for commercial, risk management and franchise protection reasons, has advanced significantly the risk management effort ….").

Newedge USA, LLC
630 Fifth Avenue
Suite 500
New York, NY 10111

TEL 646 557 9000
FAX 646 557 8480

A subsidiary of Newedge Group
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institutional -- execute 6.4 million and clear 7.0 million lots, globally, daily.[2] Currently, in the United States, according to statistics published by the Commodity Futures Trading Commission, Newedge USA, LLC holds the second largest pool of customer "segregated" and "secured" assets of all USA-based future commission merchants.[3] Newedge's primary function is to execute (and clear) customer transactions across multiple asset classes on either an agency or riskless principal basis. Newedge conducts only a very limited amount of proprietary trading, and then generally only to hedge positions acquired through customer facilitation. In addition, as a result of its global reach and the sophisticated nature of its client base, Newedge is very experienced in cross-border issues and concerns relating to both live brokerage and DEA. In short, we believe Newedge's size, mandate and breadth of experience as a truly international "broker" makes it well-positioned to comment on and assist in formulating policies and procedures of the type at issue here.

For ease of cross-reference to the Proposed Guidance and Consultative Questions section of the Report, Section VI, Newedge provides its comments section by section below. Unless expressly stated otherwise, all of our answers apply to all three types of DEA: automated order routing through an intermediary's infrastructure ("AOR"), sponsored access ("SA"), and direct access by non-intermediary market-members ("DA").

B (1): Minimum Customer Standards

Newedge agrees that DEA customers should be required to meet certain financial and competency standards and that IOSCO's proposed standards are reasonable; indeed, they are consistent with the standards that Newedge imposes currently. However, we do not recommend that regulators impose specific minimum standards or dictate how Markets or intermediaries should apply such standards. This is because each entity may have a different view as to what are the important qualifications for DEA customers based on their own prior experience and assessment of risk. Therefore we respectfully suggest that Markets and intermediaries should adopt as a "best practice" certain minimum standards for all DEA customers and these may include (or not include) the proposed articulated minimum standards; however, the specific standards and application of such standards, should be determined by the Markets and intermediaries themselves.

B. Pre-conditions for DEA

B. (2): Legally Binding Agreement

Newedge agrees that there should be a recorded, legally binding contract between each DEA customer and intermediary. This is because there should be no uncertainty as to the responsibilities of an intermediary and DEA Customer. However, the content of any such agreement should be a matter of negotiation between commercial parties and not mandated by any regulatory agency. This is because of many of the reasons articulated in our response to B (1) and the simple fact that the technical approaches and documentation practices are currently not necessarily consistent across asset classes, let alone from country to country.[4] That being said, Newedge would strongly endorse that disparate industry associations, such as the Futures Industry Association and Securities Industry and Financial Markets Association, work together to develop a uniform DEA agreement – such as the FIA Uniform Give-up Agreement – to help harmonize the different approaches and documentation practices to DEA across asset classes and the world. However, we recognize that such an initiative is nirvana and many years off, at best.[5]

In addition to the elements articulated in B (2), Newedge believes that such a contract should include acknowledgment that the intermediary has the right to set appropriate pre-trade risk limits, audit such limits, and cancel any and all working orders as well as suspend trading at any time if it believes in good faith that a user's behavior potentially is violating any applicable regulation or is disruptive to the marketplace.

Newedge believes that SA DEA customers should be required to enter a contractual relationship with each Market[6] as well because this would enable each Market to receive a direct representation from each DEA customer that it understands the Market's rules. In

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[2] As of September 2008.

[3] As of March 2009.

[4] See SIFMA Letter ("We believe any provisions in NASDAQ's rule covering contractual relationships need to incorporate the extensive work that has already been done voluntarily by the industry ..... and otherwise be flexible, workable, sustainable and commercially realistic").

[5] Newedge also believes it may be appropriate to have different types of DEA agreements for retail (private) and non-retail (private) customers, as well as enhanced disclosure obligations for retail clients.

[6] This could simply be in the form of an acknowledgement of applicable rules by the SA DEA customer.

addition, this enables each Market to more easily identify each SA DEA Customer (which will augment its own market surveillance) and would alleviate the burden on each intermediary to have to provide this information itself, as well. Newedge also believes that Markets should share the responsibility with intermediaries in ensuring that DEA trading is conducted in a compliant and responsible fashion.

B. (3): Sub-delegation

For AOR DEA customers: Newedge agrees that the sub-delegate should be responsible for entering into a contract only with the intermediary to provide information on the nature of who has direct access privileges including whether black box routines will be used or whether multiple users will have direct access and the nature of such users. The intermediary should be responsible for the market activity of such sub-delegates.

For SA DEA and DA DEA customers: the sub-delegate should be required to enter into a contractual relationship with both the intermediary and the Market to ensure that such sub-delegate is properly identified to both the intermediary and the Market. Such contract should include an acknowledgement by the customer of familiarity (and agreement to comply) with market rules, degree of financial expertise, number and identity of users, and whether a black box routine will be involved or not.

C. Information Flow

C. (1) Customer Identification

Currently, there are sometimes issues with identifying sub-users in general because the whole concept of "user" is difficult to define in a world of black box trading. In addition, the market does not always facilitate the correct identification of users by making it simple to pass on an electronic identifier (e.g. FIX Tag 50 sender subid).

Newedge agrees that it would be useful to assign a unique customer ID or mnemonic for each DEA customer; however, if this requirement is adopted, identifiers must be easy to maintain and implement technologically. Markets should work with intermediaries and vendors that provide DEA software to ensure that such identification system is simple and standardized across all exchanges.

C. (2) Pre and Post Trade Information

Newedge believes without a doubt that markets should provide member firms without additional cost access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls. This is critical.[7] As noted above, we believe Markets should shoulder the responsibility with intermediaries of ensuring that DEA trading is conducted in a compliant and responsible fashion, and providing intermediaries with relevant market data to assist them in conducting such monitoring seems relatively little to ask.

Newedge believes that Markets should make available to member firms all pending order information for each DEA customer on an immediate pre-trade basis. Newedge also believes that all execution information also should be provided to member firms on an immediate post-trade basis and not necessarily through the clearing and settlement process only; information received by that time could be too late for meaningful reaction. Ideally, such information should be easy to trace to a particular DEA customer using a customer identifier and such information should be easy to access from a technological perspective.

D. Adequate Systems and Controls

D. (1) Markets

Newedge agrees that intermediaries should have adequate operational and technical systems to manage their DEA systems. However, industry practice indicates that the extent and degree to which each intermediary applies such systems to each DEA customer varies widely, and thus, we recommend that such systems be subject to the business practices of each intermediary and not to any specific prescription for pre-trade controls that is dictated by Market rules or regulations. Again, application of any intermediary system is subject to its own prior history and assessment of risk.

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[7] Newedge currently employs a global computerized system to help it monitor its customers' compliance with Market rules. It has been stunned that not all Markets readily (let alone enthusiastically, without additional cost) provide it with necessary trade information to assist it to ensure it and its customers are complying with the Markets' own rules.

D. (2) Intermediaries

For AOR DEA customers: Newedge agrees that automated pre-trade filters are desirable and feasible. Newedge believes that at a minimum, order size or "fat finger' controls should be in place and that for intermediary designated customers, pre-trade maximum intraday position or credit limits should be in place. However, regrettably, maintaining these "automated pre-trade filters" with the technology available today is labor intensive and prone to errors in implementation because of its nonstandardization across markets and vendors.

For SA DEA and DA member DEA customers: Newedge agrees that automated pre-trade filters are feasible. However, Newedge believes that it is not always feasible for an intermediary to enforce the implementation of such filters. Newedge does not believe that markets should require an intermediary to require such filters of these types for DEA clients without providing intermediaries the tools to access and enforce such filters. Newedge believes that the markets should make such filters available at the market level to ensure they are under the control of the intermediary without requiring the intermediary to intrude into the technical environment of the DEA customer which would create additional, significant operational risk. Moreover, such controls must respect the desire of DEA customers for the lowest possible latency.

For all DEA customers: Newedge believes that pre-trade filters for position limits and credit limits should be defined in a different way from the overall position or limit exposure definition for each client. From a technological perspective, it is not feasible to have an accurate picture of the DEA client's overall credit exposure based on the trading that takes place through one particular trading system or market. The client will have positions in other markets and on other platforms that could either mitigate or aggravate the positions accumulated on particular platform or market. In addition, most pre-trade filters do not easily take into consideration start of day positions. A client's overall credit exposure is typically calculated taking start of day positions and trading on all markets.

Newedge believes that post-trade controls provide a needed additional and important control on the trading activity of customers. However, they generally do not include working orders. In addition, even if a proactive post-trade alerting system is in place, action may still be required to either terminate a customer or cancel working orders. The delay between when an alert is received and when action is taken can result in substantial losses before control is restored. Newedge would prefer that Markets facilitate adequate pre-trade controls to ensure that inappropriate customer trading is not undertaken without automated controls being enabled to mitigate risk.

We hope these answers are helpful, and we would be pleased to provide any additional insight into our views to staff. Please feel free to contact Leslie Sutphen, Newedge Global Head of eSolutions, +1 (312) 762-1341 or by writing to leslie.stuphen@newedgegroup.com or the undersigned at +1 (646) 557-8458 or by writing to gary.dewaal@newedgegroup.com.

Again, thank you for soliciting the industry's views.

Very truly yours,

Newedge

Gary DeWaal
Senior Managing Director and Global General Counsel

Cc: Patrice Blanc, CEO
Leslie Sutphen, Global Head of eSolutons

Comment from Nomura Sec. Co. Ltd.

VI. PROPOSED GUIDANCE AND CONSULTATIVE QUESTIONS

A. Introduction

Markets and market intermediary that are market members should have appropriate policies and procedure in place that seek to ensure that Customers granted DEA will not pose undue risk to the market and relevant intermediary. The increasing use of DEA has created, There is the potential, particularly if proper controls are not implemented, that a Customer may intentionally or unintentionally cause a market disruption or engage in improper trading strategies that may involve some elements of fraud (including manipulation), and/or that may expose the intermediary to excessive credit risk. Unauthorised access is also generally recognized as being a major concern in terms of market integrity and security.

SC2 and SC3 have identified three key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

① Pre-conditions for DEA

② Information Flow

③ Adequate systems and controls

For each of these elements, SC2 and SC3 have identified possible principles that would provide in the DEA area. The Technical Committee invites comments from industry and the general public on these possible principles or on any other aspect of this Report.

Please indicate in your comments whether they apply to AOR, SA, Direct Access by Non-Intermediary Market-Members, or to all three DEA pathways.

The following answers are applicable to all three above unless the question is specific for some categories.

B. Pre-Conditions for DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLES: DEA Customers should be required to meet minimum standards, including:

- appropriate financial resources;

- familiarity with the rules of the market and ability comply with the rules o the

market;
- knowledge of the order entry system which the Customer is permitted to utilize; and
- proficiency in the use of that system.

○ Are these the appropriate qualifications for DEA Customers?
Yes, they are.

(2) Legally Binding Agreement:
POSSIBLE PRINCIPLES: There should be a recorded, legally binding contract between the intermediary and the DEA Customers, the nature and detail of which should be appropriate to the nature of the service provided.

○ Do you agree? If not, please explain.
We agree with it.

○ What are the key points to be addressed in such a contract? See section V.B(2) for possible elements that could be included.
The possible elements that could be included should be the same as the Section V.B(2).

Should SA DEA Customers be required to enter into a contractual relationship with the market as well?
Yes they should.

(3) Sub-delegation:
POSSILBE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegate if required by a market authority.

○ What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?
Tri Party Agreement is required to enter into among DEA Customers, sub-delegatee and market-members. In addition to entering the electric trading agreement, an order flow (DEA Customers delegate to order to sub-deledatee and market-members receive

orders from sub-delegatee) is required to ensure.

C. Information Flow

（1） Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

○ What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

As ordering sessions are divided by each end DEA Customers in our company, we are able to define the end DEA Customers and both sub-delegatee and the end DEA Customers recognize its attribution. Therefore, there is no any particularly problem for obtaining and providing customer's attribution.

○ Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

DEA Customers should be assigned their Customer ID or mnemonic to the end Customer levels in order to do possible operation in the above.

（2） Pre- and Post-Trade Information

POSIBLE PRINCIPLE: Markets should provide member firms with access to all pre-and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

○ Do you agree with this proposed principle? If not, please explain.

We agree with it.

○ What information do intermediaries need to receive on a pre-post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

Details of information are sufficient to receive market information provided by Stock Exchanges currently. However, considering control DEA Clients, the time to send the information should be improved and the information is to provide on microseconds level.

D. Adequate Systems and Controls

（1）Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

○ Do you agree? If not, please explain.

We agree.

（2） Market intermediary

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBILE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA system.

○ Do you agree that such automated pre-trade filters are desirable and feasible? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

We agree that the pre-trade filters are desirable and feasible. The filter is changed how the end Customers and sub-delegatee want to the filter. However, we consider a minimum check of filter is required to check trade amount per/trade and per/day.

○ Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trade that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limit that might be imposed on such a Customer?

If market-members set-up position limits to the end Customers, a distinction will be needed. If not, we will not think any distinction of these 2 filters.

○ As an alternative to pre-trade filters, some intermediaries and markets believe that

post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

A merit will be the fastest execution process if we migrate over to the post-trade controls. However, the post-trade controls are controlled after trades are completed. It is difficult to control that Customers trade exceeding trade limits and prevent to trade over contractual breaches. Therefore, we think that a complement of post-trade controls is a part of alternative to pre-trade filters.

○ Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?
If intermediaries check the down tick of short selling rules, there will be changes until orders are accepted in the market. Therefore, pre-trade controls should be at both the intermediary and market levels.

○ Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business?
All are not similar or equivalent. For example, in the case of short selling, for non –DEA process, we can check control short selling rules between sales traders with customers thus no pre trade check mechanism is not fully automated. However for DEA process, we need to do the necessary checks before we receive the orders thus there may be the different logic to be applied.

○ Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?
Please refer answers in C-(2).

○ When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?
We consider a limit of transaction amount per transaction in advance by Agreements.

There is no decrease of credit risk to the clearing firm when the clearing firm accepts trades.

○ Can intermediaries who receive “drop copies” of their SA Customer’s orders stop the orders prior to execution? If not, what is the utility of such a tool?
We consider to able to stop the orders prior to execution as we have entered into agreements and have had a control of implement system.

○ Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem.
There is no concern that other than those above.

○ Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.
Maintain legal compliance, hypothecate (collateral) agreement with credit limitation by each customer and its check function (systems and procedures)

B. Pre-conditions for DEA:
(1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:
- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

o Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

OFTPL Response: We agreed that customers should meet the minimum standards as follow:

(a) Appropriate Financial Resources

Customer should have the financial capability and resources to manage futures trading as it is a highly leveraged product. With a strong financial standing, customers will be able to ride through the volatility of the market movement. By having credit-worthy customer, this will reduce the credit and financial risk exposed to OFTPL and other participants including Exchanges. Besides Financial Resources, the customer should obtain further expertise from the likes of qualified traders to ensure efficiency and errors minimization.

(b) Familiarity with the rules of the market and ability to comply with the rules of the market

In order to promote Singapore's status as a Global Financial Hub, Singapore should maintain high standards in regulatory and compliance control. In order not to compromise the reputation of Singapore Finance Industry, participants should know the rules and regulations of the jurisdiction they are participating in and ensure that the rules are followed and complied with so as to promote Singapore as a transparent and a conducive market. At the same time, this will also greatly enhance Singapore's status as a Global Financial Hub.

(c) Knowledge of the order entry system which the Customer is permitted to Utilize and proficiency in the use of the system

Due to technological advancement, trading has evolved from floor trading to electronic trading. Placing of orders are now transmitted electronically using the order management system (trading platform). In view of this, customers should know the system well so as to trade effectively and efficiently as movements within the markets can be quite volatile and time is essential when it comes to trading in futures.

Currently, clients are using multiple platforms to access to different Exchanges/Markets all over the world, it would be more efficient to have one unified platform instead for ease of access to trade and control over their risk positions.

(2) Legally Binding Agreement:
POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.

OFTPL Response: We agree that there should be a recorded, legally binding contract between the intermediary and the DEA Customer. The reasons being that having a legally binding agreement which states all the terms and conditions of the nature of the service provided will ensure that in the event of a dispute, this agreement can be brought as evidence for court hearing and used to mediate the dispute amicably. It also allows fair dealing for customers in which they have understood the agreement before committing.

In the absence of a legally binding agreement, it will be disadvantaged to both intermediary and the customers as in the event where a dispute arises, there will be an ongoing tussle, which is tedious and draining of resources at both ends. With a legally binding agreement being enacted, it could covered the intermediaries and also the customer has have to agreed with the terms and conditions before signing the agreement to prevent any confusion and discrepancies.

That said, we would like to state that for the benefit of the Financial Industry as a whole, it would be positive that contracts and agreements are initiated in a way that it define roles of the parties involved, in a clear, concise and transparent structure to ensure efficiency and success in the eventual collaboration.

- What are the key points to be addressed in such a contract? *See* section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

OFTPL Response: We currently do not partake in SA business thus have no expertise in this area.

(3) Sub-delegation:
POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

- What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

OFTPL Response:
A customer may appoint sub-delegatee whom is a Power of Attorney (POA) to act on the customer's behalf. There should be a contractual relationship of the customer with the POA as this will ensure that the customer know that the customer has given fully authority and power to the POA to act on the customer's behalf. So in the event that there is a trade dispute, the agreement will be useful.
The areas that should be covered are as follow:

(1) Establish the relationship between the POA and the customer.
(2) The professional trader who is a Singaporean is holding a valid fund management license.
(3) To explain the risk and implications of appointing POA.
(4) To obtained documentation such as a copy of the POA NRIC/Passport.
(5) Customer to sign the addendum that covers that customer acknowledgement of the professional trader, and will keep OFTPL indemnified of all risks and cost pertaining to the management of the assets by the POA.

The intermediary should also ensure the risks involved for the DEA customer are communicated to him appropriately.

Note: The areas covered are not meant to be exhaustive.

C. Information Flow
(1) Customer Identification
POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.
o What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (*e.g.*, the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

OFTPL Response: The documents / information obtained can be the persons' NRIC / Passport Number or other documents deem necessary to identify the customers.
However, due to globalization and diversification of clients' profiles and languages, some names when translated are no longer identifiable even in their home country database. Hence, it will be good if the translation methods are synchronized to better identify names globally.

o Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

OFTPL Response: Customer should be assigned with their own customer ID for proper identification. The purpose for the own customer ID serves to authenticate and verify the identity of the customer and trades being executed is being placed in the correct customer account.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

- Do you agree with this proposed principle? If not, please explain.

OFTPL Response: We agree to the principles. However, due to clients are using multiple platforms to access to different Exchanges/Markets all over the world, its difficult to consolidate all risk positions for each trader and product in the different trading systems. For example, a trader may use system A to trade for exchange X, and system B to trade for exchange Y. Intermediaries would need to consolidate the risk positions of this trader in both system A and B to know the client's overall trading risk positions. The current software in the market that is able to consolidate the risk positions are costly. It will definitely be more cost effective and allow better risk management if these multiple platforms are integrated into a single system.

- What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

OFTPL Response: The information needed for pre-trade needed to perform effective risk management include the following:

Pre-trade control

(1) Error Prevention Alert set up to prevent fat fingers.
(2) Trade monitoring of the trading patterns to determine the changes.
(3) Validity Check, Credit and Limit Check
(4) Maximum Order Quantity defined for product/exchange level.

Post-trade controls

Post trade controls refer to trade data being executed and filled. The information needed will include external parties confirmation, reconciliation of data information.

D. Adequate Systems and Controls
(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

- Do you agree? If not, please explain.

OFTPL Response: We agree that there should be adequate pre-trade controls to manage adequately the risk and to ensure fair and orderly trading. Pre-trade controls ensure that we can have control instead of post-trade controls which cannot be prevented.
Again as mentioned above:

However, due to clients are using multiple platforms to access to different Exchanges/Markets all over the world, its difficult to consolidate all risk positions for each trader and product in the different trading systems. For example, a trader may use system A to trade for exchange X, and system B to trade for exchange Y. Intermediaries would need to consolidate the risk positions of this trader in both system A and B to know the client's overall trading risk positions. The current software in the market that is able to consolidate the risk positions are costly. It will definitely be more cost effective and allow better risk management if these multiple platforms are integrated into a single system.

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

OFTPL Response: As we advance into electronic trading, trades are automated to flow into the exchange when executed and filled. As such, automated pre-trade filters will be desirable and feasible. Some of the pre-trade filters that are feasible but not exhaustive include:

(1) Credit Limit which will reduce the customer risk to the company as credit-worthiness customer will tend to receive higher limit than un-credit-worthiness customer.
(2) Position Limit serve to protect the company from permitting customers to trade beyond their financial capabilities.
(3) Maximum Order Quantity limits the quantity that can be put in to prevent fat finger.
(4) Stop button that is activated in an emergency to stop customers that have exceeded the internal limit.

- Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

OFTPL Response: We do not think that there should be a distinction drawn between pre-trade filters for position limits and credit limits as the main objective is to minimize the risk or losses that can be incurred by the company through clients' trades.

- As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

OFTPL Response: Post trade controls will be referring to trade that have been executed and filled. By having a post trade controls, merits far exceed the drawbacks from the risk management perspective.
The merit derived is the information generated is accurate and can be relied on due to this information going through proper, intense analysis. By having timely information, the stakeholders will be able to make sound and judgmental decision in the daily activities of the business and also implement feasible strategic decisions. In other instances, the shareholders can rely on the reports generated when deciding to increase their stake in the company.

However, from a market participant's perspective, they will view it as a drawback instead of a merit as they believe that speed is the key to success in the volatile market conditions. As such, there will be two different views and opinions from the front-end role and the back-end role. There should always be a balance between both sides.

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

OFTPL Response: The best scenario is pre-trade controls to be provided at both levels. However, this will not be really appropriate as the risk should be managed by the company itself and not the market. The reasons being the strategic action is implemented by the senior management of the company of how the company should go in the near future and the purchase of equipments, hiring of manpower and trading systems are all determined by the company as a whole. As such, it may look unfair for the market to also take in the role of the pre-trade control. It may be appropriate for the market which is the regulator to be more involved in the surveillance of the market conduct as a whole for detection of any transactions that violate the rules.

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

OFTPL Response: We do not agree that the controls should be present for non-DEA business as systems are computerized which works differently as compared to manual checking.

We would also like to state that there may be potentially many different factors that we need to analyse between the two, due to the differing client profiles and of course risk profiles, for us to generalize the practicality of utilizing the same set of rules and components for both DEA and non-DEA will result in an inefficient trading environment.

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

OFTPL Response: Not applicable. We currently do not have any SA clients.

- When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

OFTPL Response: We do not agree that the mere fact that the customer is a market-member will reduce the credit risk as credit risk can come from other external factors such as whether the customer is blacklisted by the credit bureau as non performing customer, a bankrupt or involved in embezzlement or fraud. These are some of the indicators that could also determine the credit-worthiness of the customer.

- Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

OFTPL Response: N.A. We do not have SA Customers.

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

OFTPL Response: Electronic trading latency involves a large spectrum of possibilities and causes (eg. trading volume, electronic trading server capacity loading, Internal LAN & external WAN network connectivity, Exchange connectivity and servers loading capacity). From the member perspective, we view & address latency issues on a holistic manner and to improve areas within our control that warrants upgrades in performance. We do not raise any disclosures or alerts for latency issues due to it's multi-linked nature and complexity in establishing root-cause, especially latency spikes could only occur within secs in an average day trading. However, we do take special attention and would disclose concerns should the electronic trading system service is totally unavailable for operational trading usage (if due to pro-longed or severe latency issues)

- Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

OFTPL Response: The concept of minimum operational capacity of electronic trading systems are vastly subjecting to the requirements that were set forth by the ISV (independent trading system vendor). There are no common technical industry standards as the nature, scope & size of the electronic systems varies amongst the ISVs.

The member firm will adhere to the minimum technical standards that are recommended by the ISV when rolling-out or implementing a trading system in order to assure that trading performance is not compromised.

Response from OCBC Securities Pte Ltd ["OSPL"]

Besides the questions in the Consultation Paper, the company was asked to respond to the following:

- *For sponsored access, does your firm impose or require your customers to have pre-execution "fat finger" or error prevention filters? Provide examples of such filters.*
- *Do these filters reside within the customer's own trading system or elsewhere?*

OSPL : Based on the definition of "sponsored access", OSPL does not have sponsored access system or customers. For iocbc and DMA customers, their orders are transmitted to our system first before they are routed to SGX's trading system.

If OSPL were to have sponsored access customers, we could request them to provide a terminal for our risk management team to control / view their trading limits and filters to be configured. In this case, the filters can still reside within the customers' own OMS.

We could also ask for their risk management system design specifications for verification or regular reviews.

VI. PROPOSED GUIDANCE AND CONSULTATIVE QUESTIONS

A. Introduction

It is the view of SC2 and SC3 that markets and intermediaries should have appropriate policies and procedures in place that seek to ensure that customers granted DEA will not pose undue risks to the market and the relevant intermediary.

In broad terms, with the increasing use of DEA, there is the potential, particularly if proper controls are not implemented, that a customer may intentionally or unintentionally cause a market disruption or engage in improper trading strategies that involve some elements of fraud or manipulation. Unauthorised access is also generally recognised as being a major concern in terms of market integrity and security.

SC2 and SC3 have identified the key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

(i) Pre-conditions for DEA
(ii) Information Flow

(iii) Adequate systems and controls

Based on the areas identified above, SC2 and SC3 sets forth the following elements that could support principles in the DEA area. SC2 and SC3 invite comments from industry and the public on these matters.

Please indicate in your comments whether they apply to automated order routing systems, sponsored access or direct access by non registrant/non intermediary market members, or all three:

B. Customer Pre-conditions for DEA:

(1). Minimum Customer Standards

POSSIBLE PRINCIPLE: Customers using DEA should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the customer is permitted to utilize; and**
- **proficiency in the use of that system.**

- QUESTION: Should IOSCO consider a principle regarding minimum customer standards, and if so, are these the appropriate qualifications for such DEA customers?

OSPL : In principle, we are of the view that customers using DEA should be required to meet minimum standards, especially the standard on appropriate financial resources for sponsored access customers. However, we note that customers using DEA would include Internet trading customers. Operationally, it would be difficult to determine whether a customer is familiar with the rules of the market, has adequate knowledge of the order entry system, or proficient in the use of the system. However, for the purpose of investor education, we have posted market prohibited practices and iocbc user guide on iocbc website.

***(2).* Legally Binding Agreement:**

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.

- What are the key points to be addressed in such a contract? *See* section V.B(2) for possible elements that could be included.
- [SC2: Please consider a question regarding a contractual agreements between markets and sponsored access DEA customers]

OSPL: We are of the view that there should be a legally binding contract between the intermediary and the DEA customer. The use of electronic trading system is already covered under OSPL's Standard Trading Terms and Conditions.

(3). Sub-delegation:

POSSIBLE PRINCIPLE: Where a customer of an intermediary is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the intermediary should seek to ensure that its contractual arrangements with its DEA customer allow it to identify the sub-delegatee if required by a market authority.

- What requirements should be applicable if a DEA customer is permitted to delegate its access privileges directly to another customer (sub-delegation)? For example, should the sub-delegated customer be required to enter into a contractual relationship with the intermediary, the DEA customer and/or the market? If yes, what areas should be covered by such a contract?

OSPL: We agree that where a customer of an intermediary is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the intermediary should seek to ensure that its contractual arrangements with its DEA customer allow it to identify the sub-delegatee if required by a market authority. The sub-delegated customer should be required to enter into a contractual relationship with the intermediary as well as the DEA customer.

C. Information Flow

(1) Customer identification

POSSIBLE PRINCIPLE: Intermediaries should disclose promptly to market authorities upon request the identity of their DEA customers in order to facilitate market surveillance.

- Should this information be given only upon request or on a transaction basis?

- What problems, if any, do you have, in obtaining or delivering this information? If problems exist, how could information flow be improved? (*e.g.,* the use of sub-user identifiers for DEA orders on a transaction basis? Other possible solutions?) Please explain.

OSPL: We agree that intermediaries should disclose promptly to market authorities upon request the identity of their DEA customers in order to facilitate market surveillance. This information should be given upon request.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should be required to provide member firms with access to all pre and post trade information (on a real-time basis) necessary for intermediaries to implement appropriate monitoring and risk management controls discussed below in section 3.

- Do you agree with this proposed principle? If no, please explain.

- Are intermediaries receiving sufficient information from markets regarding pending order flow from DEA customers? Please elaborate.

- What is the information that intermediaries deem necessary to receive on a pre- and post-trade basis to perform effective risk management controls? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to properly implement pre-trade controls?

- Is there any specific issue regarding the availability of the pre and post-trade that would deserve further consideration?

OSPL: We agree that markets should be required to provide member firms with access to all pre- and post- trade information (on a real-time basis) necessary for intermediaries to implement appropriate monitoring and risk management controls.

D.. Adequate Systems and Controls

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a

customer from placing an order that exceeds existing position or credit limits on such a customer.

OSPL: We agree that intermediaries should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a customer from placing an order that exceeds existing position or credit limits on such a customer. Currently, GL OMS has such features. The pre-trade controls should be at the intermediary's level.

POSSIBLE PRINCIPLE: Intermediaries shall have adequate operational and technical systems to manage its DEA systems.

OSPL: We agree that intermediaries should have adequate operational and technical systems to manage its DEA systems.

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying customer position and/or credit limits.

- Do you believe any distinction needs to be drawn between automated pre-trade filters that merely apply a position limit on such a customer, as opposed to automated pre-trade filters that address the credit exposure for each customer, and stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors?

- As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non DEA business. And if so, in what way should they be different?

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to sponsored access?

- When a non-clearing market-member places a trade, does the mere fact that the customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

- Can intermediaries who receive “drop copies” of their sponsored access customer’s orders stop the orders prior to execution? If not, what is the utility of such a tool?

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem and a potential response.

6. **Appendix I**

SC2 used the following definitions:

“Direct Electronic Access (DEA)”: DEA refers to the process by which a person transmits orders on their own (i.e., without any handling or re-entry by another person) directly into the market’s trade matching system for execution.

"Participant" – a person that is granted access to the market to transmit orders using DEA, whether or not a licensed or registered intermediary.

“Person”: Use of the word “person” is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

“Sponsored Access”: – An electronic access arrangement under which an intermediary Participant permits a customer to transmit orders through its own system and gateway directly to the trading system or, less commonly, to send orders electronically to the trading system through a service bureau pursuant to an arrangement between the vendor and the intermediary Participant(s).

“Sponsored Access Person”: A Person who contracts with one or more Participants for Sponsored Access to the market.

“Market” refers to exchanges and alternative trading facilities.

SC3 used the following definitions:

“Access through intermediary or third party infrastructure”: An electronic access arrangement under which a customer of an intermediary (such as a broker or broker-dealer) is able to transmit orders to one or more markets’ order matching system for execution through the intermediary’s own infrastructure and gateway directly, or to send orders to the market through a service bureau’s IT infrastructure, pursuant to an arrangement between the vendor and the intermediary.

“Access without utilization of intermediary infrastructure”: This refers to the process by which a customer (such as a fund manager) of an intermediary (such as a broker or broker-dealer), transmits orders on their own (i.e., without any handling or re-entry by the intermediary), directly into one or more markets’ order matching system for execution. While the customer may be using the intermediary’s “tag” number, or name, the order does not go through the intermediary’s infrastructure (including the intermediary’s order routing IT systems). Such direct access, without utilization of the intermediary’s infrastructure, could be referred to as “back-door” access to the market.

"Customer" – a person that is granted access to the market to transmit orders using *either* access through an intermediary’s infrastructure, or access without utilization of the intermediary’s infrastructure, whether or not that person is a licensed or registered intermediary.

“Person”: Use of the word “person” is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

“Market” refers to registered or licensed exchanges.

GCD/MAS/2009/028

Mr Greg Tanzer,

We refer to the IOSCO Consultation Report 'Policies on Direct Electronic Access' issued in Feb 2009.

The following are some of the comments that we have on the Consultation Report:

(B-1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system**

Are these the appropriate qualifications for DEA Customers?

- As the market-members guarantee the trades of the DEA customers, there should be flexibility for the market-members to determine the financial resource requirements of their DEA customers.
- As for familiarity with market rules, the exchange should highlight the important rules of the market that DEA customers will need to comply with.

(B-2) Legally Binding Agreement: POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.
Do you agree? If not, please explain or elaborate. What are the key points to be addressed in such a contract?

AOR/SA: We agree that there should be a legally binding agreement between the intermediary and DEA Customer. The key elements of the agreement should include provisions that address rights and liabilities of the parties, security of the infrastructure, limits, warranties, indemnities, charges, risks, authorizations, product/customer specific conventions, conditions and restrictions, order routing standards and the requirement for the DEA Customer to comply with market trading rules.

(C-1) Customer Identification
POSSIBLE PRINCIPLE: intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA customers in order to facilitate market surveillance.

Yes, agreed. DEA customers should each be assigned their own Customer ID or mnemonic.

(C-2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Do you agree with this proposed principle? If not, please explain. What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

AOR/SA/DA: Yes, agreed. The pre-trade controls should be implemented on the exchange gateway level as a standard risk mechanism across all User mnemonics. In this way, there will not be distinct unfair advantage to any DEA participant.
Basic information required: Time stamp of order submission/received by the market, order type, buy/sell, contract details, trade source, order ID, user/sub-user identifiers.
The exchange/market should provide market-members and DEA customers a program/website for real time access to view/cancel/amend orders.
Sufficient audit trail should be provided to the market-members and DEA customers as well.

(D-1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Do you agree? If not, please explain.

AOR/SA/DA: Markets could provide pre-trade control systems to facilitate intermediaries' risk management processes. There is already one such example of a prominent US exchange that provides such a tool for pre-trade risk control on its gateway level.

(D-2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate.

AOR/SA/DA: In principle, we agree that there should be reasonable automated pre-trade filters e.g. limits on customer's credit and filters that guard against mistaken order entries (fat finger). These can be supplemented by having post-trade controls in place.

Thank you

Regards

Elsie Lian
Group Compliance
PhillipCapital
DID: 65311548

Contact: Yann Célérier, Compliance Officer

Copy to:
- Chris Davies, Global Head of Compliance
- Xavier de La MAISONNEUVE, Head of Compliance Officer Equity Derivatives & Cash Equities

18th May 2009

OICV-IOSCO Consultation Report - Public Comment on Policies on Direct Electronic Access

Société Générale ranks among the leading banks operating in the cash and derivatives markets for equities, fixed-income products and commodities. It holds numerous memberships on major securities and futures exchanges and alternative trading facilities world-wide.

For this reason, Société Générale is very concerned by questions linked to Direct Electronic Access and welcomes the opportunity to comment on the Consultation Report on "Policies On Direct Electronic Access" issued by the Technical Committee of the International Organization of Securities Commissions.

GENERAL COMMENTS

Given the large development of DEA in the previous years, the publication by IOSCO of guidance is appropriate in order to encourage each regulator to deliver locally the global standards to set up a level playing field among the various jurisdictions and to lower the risks of this activity, and among them the compliance risk which is significantly increased by the difference between exchanges rules.

On a general basis, Société Générale considers that the content of the Report is pertinent and accurate but believes that the issues raised by "Direct Access by Non-Intermediary Market-Members" are very different from those raised by "Automated Order Routing Through Intermediary's Infrastructure" (AOR) or "Sponsored Access" (SA).

Direct Access by Non-Intermediary Market-Members. In this situation, the market member which is not registered as an intermediary has the same obligations than another market member. It is true, as mentioned in the report, that a non registered intermediary has to enter a clearing arrangement with a General Clearing Member (GCM) but the situation is the same for a registered intermediary which is not a clearing member. Therefore, this issue will not be considered in this Comment.

Sponsored Access In order to prevent risks for market integrity and because of the market member's responsibility toward regulation, Société Générale considers that the rules governing SA should be at the same level as the rules governing AOR. In particular, pre-trade

filters should be put in place by the market members and/or the markets even if it is at the expense of latency.

Market Members' Responsibility and Traders' Responsibility Among all the differences between the exchanges rules, it should be pointed out that in some jurisdictions each access to the market is allocated to an employee (trader) of the firm which has to be identified to the exchange and who is responsible of the entire orders send trough this access. Société Générale considers the management of DEA should be under the sole market members' responsibility.

IOSCO QUESTIONS

B. Pre-condition for DEA:

(1) Minimum Customer Standards
POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:
• Appropriate financial resources;
• Familiarity with the rules of the market and ability to comply with the rules of the market;
• Knowledge of the order entry system which the Customer is permitted to utilize;
• And proficiency in the use of that system.
Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

Société Générale agrees with these minimum requirements

(2) Legally Binding agreement:
POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.
• Do you agree? If not, please explain or elaborate.
• What are the key points to be addressed in such a contract? See section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

Société Générale already has contracts with DEA Customer which cover the elements mentioned in V.B (2). Concerning SA, since Société Générale considers, as mentioned in the General Comment, that the rules governing SA should be at the same level as the rules governing AOR, there is no need of any contractual relationship with the market.

(3) Sub-delegation:
POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identity the subdelegatee be if required by a market authority.
• What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the subdelegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

For Société Générale, the responsible intermediary has a contractual relationship with its DEA customer only. If the DEA customer is allowed to sub-delegate its direct access, the responsibility should remain at the customer side. If a market authority (by market authority it must be understood a regulator) needs to identify the sub-delegatee, it should directly

address its request to the DEA Customer. Therefore Société Générale is not in favour of this principle.

C. Information Flow

(1) Customer Identification
POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.
• What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (e.g., the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?). Please explain.
• Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

Société Générale believes that the identification of their DEA customers or the identification of the potential subdelegatee in order to facilitate market surveillance is not an issue. On request, the intermediary (and also the DEA Customer) can easily provide the market authority (by market authority it must be understood a regulator) with the identity of its DEA Customer (sub-Customer). This does not imply any specific technical requirement.

(2) Pre and Post-Trade Information
POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre and posttrade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.
• Do you agree with this proposed principle? If not, please explain.
• What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

Société Générale agrees with this principle. It must be pointed out that concerning AOR arrangements, the responsible intermediary still has the information from the markets. The needs are the same for AOR DEA than for other types of orders managed by the firm. The Principle should focus on SA arrangements which should only be possible if the intermediary has a view of pre-trade information in order to be able to stop the orders.

D. Adequate Systems and Controls
(1) Markets
POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their Customers have adequate pretrade controls to manage adequately the risk to fair and orderly trading.
• Do you agree? If not, please explain.

Société Générale agrees with this principle

(2) Intermediaries
POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.
POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Société Générale considers that these principles should only concern trading firms and not clearing firms.
The responsibility to conclude a DEA arrangement relies only on trading firms (whether the trading firm is self clearer or not) and has no consequence on the clearing of the transactions. Anyway it would be impossible for a clearing firm (General Clearing Member) to monitor post trade information of the clients (DEA customers) of their clients (trading firms).

• *Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.*

Yes automated pre-trade filter for AOR and SA are desirable and feasible.

• *Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit traders that exceed such position limits and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?*

Both types of filter may be necessary.

• *As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?*

Société Générale believes that post trade control are not sufficient to manage risks involved in DEA transactions. The needs of some markets participants to have the fastest execution possible must not be done at the expense of the market integrity and in a way that increases the market risk taken by the intermediary which provides DEA arrangements.

• *Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?*

For AOR arrangement, pre-trade control is made at the intermediary level. For SA arrangement, both should be possible. But, because of the market-member's responsibility (see B.2), after all it should not make any difference: the intermediary will have to determine the level of the filters even if they are technically set up by the market. In these conditions, there are no needs of 2 levels of filters which will be at the expense of latency.

• *Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.*

There is no reason to have, in principle different systems and control procedures for DEA and non DEA business. For DEA, the key issue is the need of a robust and reliable automatic system.

• *Do markets or the CCP currently provide intermediaries with the functions/systems needed to* conduct effective risk management relating to SA?

The CCP is not involved and has not to be involved specifically in the risk management relating to DEA. Anyway, the CCP has no information about the DEA arrangement signed by the trading firms.

• *When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?*

Société Générale does not understand this question. The clearing firm which has the possibility to accept or not a trading firm, faces the same credit risk whether the trading firm is registered or not.

• *Can intermediaries who receive "drop copies" of their SA customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?*

On a first analysis, this kind of arrangement does not seem sufficient.

• *Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem*

Société Générale considers that the analysis provided by the "Report" on latency concerns is pertinent.

Société Générale
Tour Société Générale
SEGL/DEO
17 cours Valmy
92972 Paris La Défense Cedex
France

Tél: +33 (0) 1 42 14 38 30
Fax: +33 (0) 1 42 14 2511

www.socgen.com

Dénomination sociale
Société Anonyme au capital de:
556 441 448,75 Eur
Siège social:
29 bd Haussmann
75009 Paris
552 120 222 R.C.S.

IOSCO Consultation – Questionnaire

The following responses are provided by, and relate to, UBS Securities Pte. Ltd. ("**UBSSPL**"), a member of the Singapore Exchange Ltd. – Securities Trading ("**SGX-ST**") market and a trading member of the Singapore Exchange Ltd. – Derivatives Trading ("**SGX-DT**") market, and to UBS Futures Singapore Ltd. ("**UBSFS**"), a trading and clearing member of SGX-DT, (collectively "UBS").

UBS offers two basic forms of electronic exchange access solution to its customers, in relation to both cash equities and exchange traded derivatives:

- Where the customer's order flow passes through UBS's infrastructure (including its exchange gateways and pre-trade filtration mechanisms) this is referred to as Direct Market Access ("**DMA**"). This includes UBS's own internal electronic trading applications, external vendor applications and FIX connectivity.
- DMA at UBS incorporates the term Direct Strategy Access ("**DSA**") which allows direct electronic connectivity for algorithmic trading systems. This is currently restricted to SGX-ST.
- Where UBS provides sponsored direct electronic access, such that the customer's order flow does not pass through UBS's infrastructure, this known internally as Direct Exchange Access ("**DEA**"). This is currently restricted to SGX-DT and is generally only offered to customers that hold Trading Member (Proprietary) status on SGX-DT.
- The terms DMA and DEA where mentioned by UBS herein shall have the meanings set out above. DSA is a subset of DMA for the purposes of this response.

B. PRE-CONDITIONS FOR DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

Q. Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

For DMA UBS does not agree that DMA customers should be required to meet globally standardized and mandated minimum standards. Firms should be free to provide DMA type access to such customers as it deems fit, subject to an overarching principle that DMA access should only be applied to customers where this is reasonable and appropriate, and subject to the firm's own internally prescribed minimum standards (which may indeed be higher than those of the proposed minimum standards outlined above) and in accordance

with its internal customer on-boarding and know your customer procedures. UBS considers that this would provide firms with greater flexibility in determining whether it is appropriate to make DMA available to a particular customer.

For DEA UBS recognizes the increased risks inherent with DEA or sponsored access type business and in consequence agrees that customers should be required to meet certain minimum standards before being granted access. In addition to the requirements noted above other minimum requirements which IOSCO may wish to consider are: holding some form of regulated status or being a member of a recognized industry organization or association; or possessing a level of sophistication and a corporate governance structure which is commensurate with institutional entities such as investment banks. Where the DEA customer is itself a non-clearing or trading-only member of the exchange, any minimum standard requirements will largely be met by virtue of this membership.

With regard to the points above concerning familiarity with the rules of the relevant market or knowledge of, or proficiency in the use of, the relevant order entry system, UBS should like to recommend that some form of standardized, exchange mandated risk disclosure document could be used to ensure the relevant levels of knowledge and system familiarity are provided to customers (see also our response to Question B(2) below for further elaboration).

(2) Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

Q. Do you agree? If not, please explain or elaborate.

Agreed for both DMA and DEA. For DMA UBS employs a standard agreement which is applicable to all customers, for both cash securities and exchange traded derivatives business, and for all exchanges. UBS does use legal agreements in relation to DEA type access however these agreements tend to be more specialized and their content is typically driven by the particular requirements of the relevant exchange.

UBS believes that the existence of globally standardized, exchange mandated, non-negotiable legal documentation for DMA type access would be extremely beneficial for all market participants as it would provide clarity to all participants, would create a level playing field for all DMA provider firms and would save considerable time and legal costs from extensive contract negotiations. Such a document should contain all the appropriate risk disclosures, links to exchanges rules and regulations, high level details on the operation of the electronic trading system or order book, etc. as noted in relation to Question B(1) above.

In addition UBS also believes that the existence of such standardized documentation for DEA type access would also be beneficial, however as noted above the peculiarities and requirements of DEA type access tend to be exchange specific. In this case UBS suggests that a standardized core document be developed, to which exchange specific schedules or

appendices can be appended, where these are specifically required due to some intrinsic requirement which is peculiar to a particular exchange. IOSCO should of course encourage each of the global exchanges to conform as far as is possible to the core standard, to avoid an excess of schedules or appendices.

UBS further believes that IOSCO should consider engaging the relevant industry associations (e.g. the National Futures Association, the Futures Industry Association, the Futures and Options Association, etc.) in order to collectively develop such a standardized core document. This would help to ensure a global standard and to spread the cost of development. In addition the various global regulators and exchanges should be encouraged to endorse or at least acknowledge this document, such that market participants can place reliance on its contents and provisions.

Q. What are the key points to be addressed in such a contract? *See* section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

The key points to be included in such a contract for DMA type access are broadly as per those set out in section V.B(2) of the consultation paper, however please note UBS's additional comments.

- Provisions that address the respective rights and liabilities of the parties such as statements that the Customer accepts all liabilities resulting from DEA use including use of identification codes, settlement and delivery;
- **[UBS additional bullet point]** Provisions that address ownership rights and IP rights relating to software and hardware provided by the intermediary / member;
- Provisions relating to the security (physical and IT security) of the infrastructure (user identity, passwords, authentication codes, etc.), to avoid unauthorized system access;
- Limits that are expressed as a notional amount for each Customer above which the orders are rejected by the system, as well as by reference to the maximum amount per order/per user [**UBS comment**: specific limits are set separately for each customer by the business in consultation with Credit and are not typically included the UBS DMA agreement.];
- Warranties, indemnities, charges [**UBS comment**: charges are not specifically addressed in the DMA agreement and will be separately agreed between UBS and client as part of the wider cash/ETD relationship] and Customer/product specific conventions;
- Conditions (such as for entering orders, error trade policies, etc.) and restrictions such as the right to suspend the service, to reject or cancel orders, etc.;
- Use of specific standard format for order routing such as SWIFT or FIX [**UBS comment**: electronic communications formats and protocols may be subject to change and furthermore not all exchanges support standard communications language protocols, therefore UBS does not consider it appropriate for specific formats or protocols to be referenced in the contractual documentation.];
- A requirement to have knowledge of trading rules and applicable laws and regulations or a requirement to comply with these;
- A requirement that the Customer's users are authorized, qualified and competent;

- **[UBS additional bullet point]** A requirement that the identity of the Customer's users will be disclosed to the intermediary and that the Customer cooperate fully with the intermediary if requested by an exchange, acting in its regulatory capacity, or from a regulator (see below for further elaboration).

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

Q. What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

Agreed for both DMA and DEA.

For DMA type access through an application provided by UBS, each customer will typically be assigned with an id for each of their users through the relevant electronic trading application (either UBS's own application or an application provided by an external vendor). Customers that access an exchange via a FIX connection will connect to the exchange via a single id provided by UBS, but may provide access via their own electronic trading systems to their own underlying users. UBS does not however consider it appropriate or necessary for UBS to be required to enter into a contractual relationship with those underlying users, particularly since the rules and regulations of the exchange generally provide that the exchange member, through whom the order flow is passed to the exchange, takes full responsibility for that order flow, regardless of whether the order flow was generated by internal users or by underlying users of the customers of that member.

The legal contract between the member and its customer will typically provide for indemnities provided by the customer in favour of the member, such that if the customer, or any of its underlying users, was responsible for a breach of rules committed through the member's trading id or mnemonic, the customer will indemnify the member against any resulting loss or damage, notwithstanding the fact that the exchange will hold the member directly liable for the breach.

UBS does recognize the fact that exchanges and/or regulators may need to determine the precise identity of the end user that is ultimately responsible for having entered an order or executed a trade, which is found to have resulted in a breach of the rules. In consequence the contractual relationship between the member firm and its customer should require the customer to be able to identify and to disclose the identity of its underlying users, in response to a specific regulatory enquiry from either the supervisory or regulatory arm of the exchange or directly from a regulator. Please note that UBS considers that this should be restricted to regulatory enquiries from an exchange, acting in its regulatory capacity, or from a regulator, and should not be a positive regulatory obligation on member firms where the enquiry emanates from the commercial or marketing arm of the exchange.

With regard to DEA type access where the DEA customer is itself a member of the exchange then the exchange will have direct contractual nexus with the 'customer' and will hold that customer / member responsible for any rule breaches committed through the its trading id or mnemonic.

C. INFORMATION FLOW:

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

Q. What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (*e.g.,* the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

For DMA type access through an application provided by UBS (either UBS's own application or an application provided by an external vendor), the identity of the users will generally be obtained at the point that trading ids are assigned to those underlying users. In which case it should be straightforward to obtain and deliver the identity of those users. For DMA access via FIX or for DEA access, the customer will connect to the exchange via a single id provided by the member or intermediary, but may provide access through that id via their own electronic trading systems to their own underlying users. In such circumstances the identity of these underlying users will not necessarily be known or disclosed to UBS, therefore as noted above it is important that the contractual documentation between UBS and its customer contains a provision which requires the customer to disclose the identities of its underlying users where specifically requested by an exchange, acting in its regulatory capacity, or from a regulator.

As noted above for DEA access the customer may be required to be a member of the exchange, in which case the rules or membership requirements of the exchange will typically require the customer / member to respond to regulatory enquiries as necessary.

Q. Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

For DMA customers UBS does not believe it is necessary for each customer to be assigned their own trading id or mnemonic at the exchange level. The order flow for each customer will generally be passed to the exchange using a generic trading id or mnemonic in the name of the member and used by multiple underlying users. Each individual end-user of one of UBS's own electronic trading systems will be assigned a unique user id within that system, however those customers connecting via FIX will have one generic id for all of their own end-users. These customers may have assigned ids to their own end-users within their

own electronic trading systems which are connecting to the exchange via the FIX connection.

For DEA UBS typically only provides this access to customers that are members of the exchange, therefore such customers will have their own trading id or mnemonic by virtue of the membership. Notwithstanding the above in the event that UBS were to offer DEA to a non-exchange member, we would require that the order flow for that customer would be passed to the exchange using a separate trading id or mnemonic specific to that customer.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Q. Do you agree with this proposed principle? If not, please explain.

Agreed for both DMA and DEA.

Q. What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

The most important requirement in relation to pre- and post-trade information necessary in order to perform effective risk management, in relation to both DMA and DEA type access, is that the information be as detailed and complete as possible and provided in a timely manner. With regard to pre-trade information particular requirements would be for the details of unfilled or pending orders and for order IDs to be included. It is important that the order ID is included such that orders can be withdrawn where necessary.

For post-trade information all basic trade details should be included (contract, execution quantity, order quantity, price, contract type, execution time, order entry time, order amendment time, etc.).

The data (pre- or post-trade) should be provided in the form of raw data as well as providing some form of access to a graphical user interface (“GUI”) terminal provided for this purpose.

D. ADEQUATE SYSTEMS AND CONTROLS:

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their

Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Q. Do you agree? If not, please explain.

Agreed for both DMA and DEA.

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Q. Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

For both DMA and DEA type access UBS agrees that automated pre-trade filters are desirable. With regard to their feasibility this largely depends on the nature of the filter in question. For example UBS considers that 'soft' limits (i.e. limits which pause an order to ensure that the operator is certain that he or she wishes to enter that order) with regard to either price or quantity are quite practicable and highly desirable. In addition UBS also notes that certain 'hard' limits (i.e. limits that absolutely prevent the entry of an order with certain parameters without the separate amendment of the prevailing limit) with regard to price and quantity (i.e. 'fat finger' type limits), are both desirable and relatively straightforward to implement. In addition with regard to cash securities or futures trading, some form of intra-day notional long or short position limit would be practicable and may also be beneficial. It should be noted however that similar functionality would be of limited benefit for options trading where the relevant delta figures would be required in order to make the limit meaningful. With regard to the issue of 'credit' limits please note the UBS comments in response to the following question below.

UBS should also like to note that pre-trade filters should ideally be implemented within the member firm's infrastructure to ensure that the member retains independent control. To the extent that the pre-trade filters are present within either the exchange's systems or those of the customer, measures must be implemented to ensure that the member has exclusive or independent control and this exclusivity or independence should be capable of being verified.

Q. Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits

and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

For both DMA and DEA type access UBS does consider that a distinction should be drawn between pre-trade notional position limits and credit limits. A 'position' limit is typically a simple notional figure, set into either the relevant trading application or the gateway through which the order flow passes to the exchange, and applied on an intra-day basis. A 'credit' limit is an exposure level calculated by reference to the aggregate value of a customer's positions as well as any collateral provided by that customer, and hence is a more complex concept.

For cash securities trading settlement is generally conducted on a delivery versus payment ("DVP") basis such that stock and cash are exchanged within a set period following execution of the transaction. Where settlement is conducted on a DVP basis, UBS does not consider that credit risk exists and hence 'credit' limits are not relevant.

In addition for exchange traded derivatives, clearing brokers perform credit limit assessments of their customers on a Trade Date + 1 ("T+1") basis. Credit limit usage can only be determined after close of trading once all allocations and reconciliations have been performed to ensure that an accurate and complete picture of a customer's overall position can be obtained.

Furthermore a credit limit is applied at the overall client relationship level and not necessarily at the individual account level. Certain customers, including those involved in statistical arbitrage trading, have on-exchange derivatives positions which off-set against off-exchange positions, either in a cash security or in an over-the-counter ("OTC") derivative. These off-setting positions may be captured within entirely separate trade capture and risk management systems within that firm or potentially even held with another firm altogether. In consequence therefore UBS considers that attempting to implement a pre-trade 'credit' limit filter would be impractical.

UBS does consider that for both DMA and DEA business some form of simple notional intra-day position limit, operating as a hard limit within a system or gateway is sufficient for controlling the risk of large position exposure, in conjunction with adequate and timely post-trade information made available to risk managers. A 'credit' limit that operates as a validation of collateral versus overall exposure however, would be extremely complicated and costly to implement, would create too much latency from the perspective of speed of execution, and ultimately is not necessary.

Q. As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

UBS considers that pre-trade limits and post-trade information should be seen as complimentary. Complete and timely post-trade information provided to a firm will enable the risk management function within that firm to utilize the pre-trade limits present within the electronic trading systems or gateways, to control or limit the customer's trading activity where necessary. UBS considers that the actual pre-trade filters which should be available do not need to particularly sophisticated and that per order or 'fat finger' type limits over price or quantity for a particular order, coupled with simple intra-day position limits, will provide an adequate means of mitigating risk without unduly restricting the speed of execution.

For example an intra-day position limit, as mentioned above, may be used by the risk management function to control the trading of a customer where it has determined that the customer's overall exposure is approaching pre-determined limits or should otherwise be restricted. Use of post-trade information in conjunction with –pre-trade filters, allows the member's risk management function to determine whether additional control is required and at what level, from a more informed position. Following on from this it is important that the risk manager retains the ability to stop or control the customer's order entry / trading capability, where this is deemed necessary, and the exchange should provide the functionality to allow this.

Q. Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

UBS considers that for DMA business the pre-trade limits should be implemented and controlled at the member level. For DEA type access pre-trade limits should be implemented and controlled at either the member level or the exchange level, **but not both**. Implementation of pre-trade limits within the member's systems is more feasible in terms of delivery in the short term and would enhance the competitive environment since, from a latency perspective, each member would have a commercial incentive to develop limits that had as little impact on latency as possible. In the event that regulations mandate that limits should be implemented at the member level then these requirements need to be strictly enforced and policed by the exchange or regulator to ensure that the application of the regulations is consistent and fair across all participants.

On the other hand implementation of pre-trade limits at the exchange level will ensure that there is a 'level playing field' for all participants and will be more certain in terms of mitigating systemic risk from direct electronic access. UBS should like to note however that broadly similar or equivalent pre-trade limits should be applied across all exchanges, to prevent certain exchanges allowing unrestricted access and using this to gain a competitive advantage when offering look-alike contracts. In addition it should be noted that consistent implementation of commensurate pre-trade limits at the exchange level across all markets is likely to take much longer to deliver.

Overall however UBS considers that it would be more desirable to implement pre-trade limits at the exchange level, in order to create the 'level playing field' and to prevent systemic risk as noted above.

Q. Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

UBS considers that the systems and controls in place for DMA and DEA business should be similar but not entirely identical to those in place for voice execution brokerage business. UBS considers that direct electronic access necessarily entails a higher degree of risk since the presence of algorithmic trading systems creates the capability of entering significantly larger numbers of orders in very short periods of time, than could arise in a voice execution brokerage context. In consequence the types of systems and controls in place should reflect this distinction. For example systems to prevent excessive bandwidth usage or to 'throttle' the message volume transmitted to the exchange's trading system should be utilized for DMA and DEA business, but may not be applicable for non-DMA / DEA type business.

Q. Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

With regard to DEA type access on SGX-DT (ie sponsored access), UBS considers that while its current risk management systems and controls are adequate, at present SGX-DT does not provide all of the functionality within its trading API, that UBS would prefer to obtain in order to conduct its risk management for DEA. UBS anticipates that the forthcoming introduction of a new OMX-based trading API will provide UBS with more enriched and real-time data.

Q. When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

No – for both DMA or DEA business UBS notes that the fact that a customer is itself a member of a market does not reduce the credit risk to the clearing firm that accepts the trades.

Q. Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

UBS notes that in theory if you have the necessary systems and configurations to receive 'drop copies' these could be used to withdraw any resting orders that had not been executed. Notwithstanding the above it should also be noted that 'drop copies' have other uses and may also be necessary for straight-through-processing and for customers to perform their own internal risk management.

Q. Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

UBS notes that differences in latency may exist between different electronic access solutions, however UBS does not consider it appropriate that any kind of obligation to make a disclosure of this fact should be mandated by rules or regulations. As part of its customer on-boarding procedures UBS will discuss each customer's specific objectives and requirements, including the level of electronic trading access, if any, that the customer may require. Disclosure of the differences in each electronic access method is likely to form part of these discussions, however UBS does not believe that it is necessary or desirable to include disclosure as a positive requirement of any relevant regulations.

With regard to the issue of equitable access each customer's business model and trading objectives will largely determine the type of electronic access that will be appropriate for that customer. While UBS does agree that it is imperative that each customer should be able, in principle, to utilize each type of electronic access method, each method will involve different levels of cost of deployment, which will need to be passed on to the customer, and as such may make a particular method inappropriate given the customer's business model and trading objectives.

Q. Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

For DMA type access UBS considers that the minimum operational requirements should include, but not necessarily be limited to, the following:

- Adequate risk management mechanisms (both pre-trade limits and post-trade information systems);
- Adequate Business Continuity / Contingency arrangements;
- Failover systems, including hot swappable gateways / line handlers / comms lines;
- Adequate procedures for system testing;

Please note that UBS does not consider that system performance or capacity should necessarily comprise part of any minimum operational or technical standards, as this will largely be driven by the amount of investment in hardware that a particular member is able and prepared to make.

For DEA type access this is more likely to be driven at the customer level, however UBS considers that any minimum operational or technical standards applied here should be commensurate with the standards of an exchange member, to the extent that the DEA customer is not otherwise required to be a member of the exchange in its own right.

IOSCO Consultation – Questionnaire

The following responses are provided by, and relate to, UBS Securities Pte. Ltd. ("**UBSSPL**"), a member of the Singapore Exchange Ltd. – Securities Trading ("**SGX-ST**") market and a trading member of the Singapore Exchange Ltd. – Derivatives Trading ("**SGX-DT**") market, and to UBS Futures Singapore Ltd. ("**UBSFS**"), a trading and clearing member of SGX-DT, (collectively "UBS").

UBS offers two basic forms of electronic exchange access solution to its customers, in relation to both cash equities and exchange traded derivatives:

- Where the customer's order flow passes through UBS's infrastructure (including its exchange gateways and pre-trade filtration mechanisms) this is referred to as Direct Market Access ("**DMA**"). This includes UBS's own internal electronic trading applications, external vendor applications and FIX connectivity.
- DMA at UBS incorporates the term Direct Strategy Access ("**DSA**") which allows direct electronic connectivity for algorithmic trading systems. This is currently restricted to SGX-ST.
- Where UBS provides sponsored direct electronic access, such that the customer's order flow does not pass through UBS's infrastructure, this known internally as Direct Exchange Access ("**DEA**"). This is currently restricted to SGX-DT and is generally only offered to customers that hold Trading Member (Proprietary) status on SGX-DT.
- The terms DMA and DEA where mentioned by UBS herein shall have the meanings set out above. DSA is a subset of DMA for the purposes of this response.

B. PRE-CONDITIONS FOR DEA:

(1) Minimum Customer Standards

POSSIBLE PRINCIPLE: DEA Customers should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the Customer is permitted to utilize; and**
- **proficiency in the use of that system.**

Q. Are these the appropriate qualifications for DEA Customers, or should others be added? Please elaborate.

For DMA UBS does not agree that DMA customers should be required to meet globally standardized and mandated minimum standards. Firms should be free to provide DMA type access to such customers as it deems fit, subject to an overarching principle that DMA access should only be applied to customers where this is reasonable and appropriate, and subject to the firm's own internally prescribed minimum standards (which may indeed be higher than those of the proposed minimum standards outlined above) and in accordance

with its internal customer on-boarding and know your customer procedures. UBS considers that this would provide firms with greater flexibility in determining whether it is appropriate to make DMA available to a particular customer.

For DEA UBS recognizes the increased risks inherent with DEA or sponsored access type business and in consequence agrees that customers should be required to meet certain minimum standards before being granted access. In addition to the requirements noted above other minimum requirements which IOSCO may wish to consider are: holding some form of regulated status or being a member of a recognized industry organization or association; or possessing a level of sophistication and a corporate governance structure which is commensurate with institutional entities such as investment banks. Where the DEA customer is itself a non-clearing or trading-only member of the exchange, any minimum standard requirements will largely be met by virtue of this membership.

With regard to the points above concerning familiarity with the rules of the relevant market or knowledge of, or proficiency in the use of, the relevant order entry system, UBS should like to recommend that some form of standardized, exchange mandated risk disclosure document could be used to ensure the relevant levels of knowledge and system familiarity are provided to customers (see also our response to Question B(2) below for further elaboration).

(2) Legally Binding Agreement:

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA Customer, the nature and detail of which should be appropriate to the nature of the service provided.

Q. Do you agree? If not, please explain or elaborate.

Agreed for both DMA and DEA. For DMA UBS employs a standard agreement which is applicable to all customers, for both cash securities and exchange traded derivatives business, and for all exchanges. UBS does use legal agreements in relation to DEA type access however these agreements tend to be more specialized and their content is typically driven by the particular requirements of the relevant exchange.

UBS believes that the existence of globally standardized, exchange mandated, non-negotiable legal documentation for DMA type access would be extremely beneficial for all market participants as it would provide clarity to all participants, would create a level playing field for all DMA provider firms and would save considerable time and legal costs from extensive contract negotiations. Such a document should contain all the appropriate risk disclosures, links to exchanges rules and regulations, high level details on the operation of the electronic trading system or order book, etc. as noted in relation to Question B(1) above.

In addition UBS also believes that the existence of such standardized documentation for DEA type access would also be beneficial, however as noted above the peculiarities and requirements of DEA type access tend to be exchange specific. In this case UBS suggests that a standardized core document be developed, to which exchange specific schedules or

appendices can be appended, where these are specifically required due to some intrinsic requirement which is peculiar to a particular exchange. IOSCO should of course encourage each of the global exchanges to conform as far as is possible to the core standard, to avoid an excess of schedules or appendices.

UBS further believes that IOSCO should consider engaging the relevant industry associations (e.g. the National Futures Association, the Futures Industry Association, the Futures and Options Association, etc.) in order to collectively develop such a standardized core document. This would help to ensure a global standard and to spread the cost of development. In addition the various global regulators and exchanges should be encouraged to endorse or at least acknowledge this document, such that market participants can place reliance on its contents and provisions.

Q. What are the key points to be addressed in such a contract? *See* section V.B (2) for possible elements that could be included. Should SA DEA Customers be required to enter into a contractual relationship with the market as well?

The key points to be included in such a contract for DMA type access are broadly as per those set out in section V.B(2) of the consultation paper, however please note UBS's additional comments.

- Provisions that address the respective rights and liabilities of the parties such as statements that the Customer accepts all liabilities resulting from DEA use including use of identification codes, settlement and delivery;
- **[UBS additional bullet point]** Provisions that address ownership rights and IP rights relating to software and hardware provided by the intermediary / member;
- Provisions relating to the security (physical and IT security) of the infrastructure (user identity, passwords, authentication codes, etc.), to avoid unauthorized system access;
- Limits that are expressed as a notional amount for each Customer above which the orders are rejected by the system, as well as by reference to the maximum amount per order/per user [**UBS comment**: specific limits are set separately for each customer by the business in consultation with Credit and are not typically included the UBS DMA agreement.];
- Warranties, indemnities, charges [**UBS comment**: charges are not specifically addressed in the DMA agreement and will be separately agreed between UBS and client as part of the wider cash/ETD relationship] and Customer/product specific conventions;
- Conditions (such as for entering orders, error trade policies, etc.) and restrictions such as the right to suspend the service, to reject or cancel orders, etc.;
- Use of specific standard format for order routing such as SWIFT or FIX [**UBS comment**: electronic communications formats and protocols may be subject to change and furthermore not all exchanges support standard communications language protocols, therefore UBS does not consider it appropriate for specific formats or protocols to be referenced in the contractual documentation.];
- A requirement to have knowledge of trading rules and applicable laws and regulations or a requirement to comply with these;
- A requirement that the Customer's users are authorized, qualified and competent;

- **[UBS additional bullet point]** A requirement that the identity of the Customer's users will be disclosed to the intermediary and that the Customer cooperate fully with the intermediary if requested by an exchange, acting in its regulatory capacity, or from a regulator (see below for further elaboration).

(3) Sub-delegation:

POSSIBLE PRINCIPLE: Where a DEA Customer is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the responsible intermediary should seek to ensure that its contractual arrangements with its DEA Customer allow it to identify the sub-delegatee if required by a market authority.

Q. What requirements should be applicable if a DEA Customer is permitted to delegate its access privileges directly to another party (sub-delegation)? For example, should the sub-delegatee be required to enter into a contractual relationship with the intermediary, the DEA Customer and/or the market? If yes, what areas should be covered by such a contract?

Agreed for both DMA and DEA.

For DMA type access through an application provided by UBS, each customer will typically be assigned with an id for each of their users through the relevant electronic trading application (either UBS's own application or an application provided by an external vendor). Customers that access an exchange via a FIX connection will connect to the exchange via a single id provided by UBS, but may provide access via their own electronic trading systems to their own underlying users. UBS does not however consider it appropriate or necessary for UBS to be required to enter into a contractual relationship with those underlying users, particularly since the rules and regulations of the exchange generally provide that the exchange member, through whom the order flow is passed to the exchange, takes full responsibility for that order flow, regardless of whether the order flow was generated by internal users or by underlying users of the customers of that member.

The legal contract between the member and its customer will typically provide for indemnities provided by the customer in favour of the member, such that if the customer, or any of its underlying users, was responsible for a breach of rules committed through the member's trading id or mnemonic, the customer will indemnify the member against any resulting loss or damage, notwithstanding the fact that the exchange will hold the member directly liable for the breach.

UBS does recognize the fact that exchanges and/or regulators may need to determine the precise identity of the end user that is ultimately responsible for having entered an order or executed a trade, which is found to have resulted in a breach of the rules. In consequence the contractual relationship between the member firm and its customer should require the customer to be able to identify and to disclose the identity of its underlying users, in response to a specific regulatory enquiry from either the supervisory or regulatory arm of the exchange or directly from a regulator. Please note that UBS considers that this should be restricted to regulatory enquiries from an exchange, acting in its regulatory capacity, or from a regulator, and should not be a positive regulatory obligation on member firms where the enquiry emanates from the commercial or marketing arm of the exchange.

With regard to DEA type access where the DEA customer is itself a member of the exchange then the exchange will have direct contractual nexus with the 'customer' and will hold that customer / member responsible for any rule breaches committed through the its trading id or mnemonic.

C. INFORMATION FLOW:

(1) Customer Identification

POSSIBLE PRINCIPLE: Intermediaries should disclose to market authorities upon request and in a timely manner the identity of their DEA Customers in order to facilitate market surveillance.

Q. What problems, if any, do intermediaries have in obtaining or delivering the identity of their DEA Customers? If problems exist, how could information flow be improved? (*e.g.,* the use of sub-user identifiers for sponsored access or sub-delegated DEA orders? Are there other possible solutions?) Please explain.

For DMA type access through an application provided by UBS (either UBS's own application or an application provided by an external vendor), the identity of the users will generally be obtained at the point that trading ids are assigned to those underlying users. In which case it should be straightforward to obtain and deliver the identity of those users. For DMA access via FIX or for DEA access, the customer will connect to the exchange via a single id provided by the member or intermediary, but may provide access through that id via their own electronic trading systems to their own underlying users. In such circumstances the identity of these underlying users will not necessarily be known or disclosed to UBS, therefore as noted above it is important that the contractual documentation between UBS and its customer contains a provision which requires the customer to disclose the identities of its underlying users where specifically requested by an exchange, acting in its regulatory capacity, or from a regulator.

As noted above for DEA access the customer may be required to be a member of the exchange, in which case the rules or membership requirements of the exchange will typically require the customer / member to respond to regulatory enquiries as necessary.

Q. Should DEA Customers each be assigned their own Customer ID or mnemonic? Please explain.

For DMA customers UBS does not believe it is necessary for each customer to be assigned their own trading id or mnemonic at the exchange level. The order flow for each customer will generally be passed to the exchange using a generic trading id or mnemonic in the name of the member and used by multiple underlying users. Each individual end-user of one of UBS's own electronic trading systems will be assigned a unique user id within that system, however those customers connecting via FIX will have one generic id for all of their own end-users. These customers may have assigned ids to their own end-users within their

own electronic trading systems which are connecting to the exchange via the FIX connection.

For DEA UBS typically only provides this access to customers that are members of the exchange, therefore such customers will have their own trading id or mnemonic by virtue of the membership. Notwithstanding the above in the event that UBS were to offer DEA to a non-exchange member, we would require that the order flow for that customer would be passed to the exchange using a separate trading id or mnemonic specific to that customer.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should provide member firms with access to all pre- and post-trade information (on a real-time basis) to enable these firms to implement appropriate monitoring and risk management controls.

Q. Do you agree with this proposed principle? If not, please explain.

Agreed for both DMA and DEA.

Q. What information do intermediaries need to receive on a pre- and post-trade basis in order to perform effective risk management? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to implement properly pre-trade controls?

The most important requirement in relation to pre- and post-trade information necessary in order to perform effective risk management, in relation to both DMA and DEA type access, is that the information be as detailed and complete as possible and provided in a timely manner. With regard to pre-trade information particular requirements would be for the details of unfilled or pending orders and for order IDs to be included. It is important that the order ID is included such that orders can be withdrawn where necessary.

For post-trade information all basic trade details should be included (contract, execution quantity, order quantity, price, contract type, execution time, order entry time, order amendment time, etc.).

The data (pre- or post-trade) should be provided in the form of raw data as well as providing some form of access to a graphical user interface (“GUI”) terminal provided for this purpose.

D. ADEQUATE SYSTEMS AND CONTROLS:

(1) Markets

POSSIBLE PRINCIPLE: Markets wishing to permit AOR and SA should have rules in place that seek to ensure that intermediaries providing DEA access to their

Customers have adequate pre-trade controls to manage adequately the risk to fair and orderly trading.

Q. Do you agree? If not, please explain.

Agreed for both DMA and DEA.

(2) Intermediaries

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a Customer from placing an order that exceeds existing position or credit limits on such a Customer.

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have adequate operational and technical systems to manage their DEA systems.

Q. Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying Customer position and/or credit limits.

For both DMA and DEA type access UBS agrees that automated pre-trade filters are desirable. With regard to their feasibility this largely depends on the nature of the filter in question. For example UBS considers that 'soft' limits (i.e. limits which pause an order to ensure that the operator is certain that he or she wishes to enter that order) with regard to either price or quantity are quite practicable and highly desirable. In addition UBS also notes that certain 'hard' limits (i.e. limits that absolutely prevent the entry of an order with certain parameters without the separate amendment of the prevailing limit) with regard to price and quantity (i.e. 'fat finger' type limits), are both desirable and relatively straightforward to implement. In addition with regard to cash securities or futures trading, some form of intra-day notional long or short position limit would be practicable and may also be beneficial. It should be noted however that similar functionality would be of limited benefit for options trading where the relevant delta figures would be required in order to make the limit meaningful. With regard to the issue of 'credit' limits please note the UBS comments in response to the following question below.

UBS should also like to note that pre-trade filters should ideally be implemented within the member firm's infrastructure to ensure that the member retains independent control. To the extent that the pre-trade filters are present within either the exchange's systems or those of the customer, measures must be implemented to ensure that the member has exclusive or independent control and this exclusivity or independence should be capable of being verified.

Q. Do you believe any distinction needs to be drawn between pre-trade filters for position limits and credit limits; that is, filters that stop or limit trades that exceed such position limits

and/or credit exposure, taking into account latency and other factors, as well as the inherent relationship between a Customer's position limit and credit limits that might be imposed on such a Customer?

For both DMA and DEA type access UBS does consider that a distinction should be drawn between pre-trade notional position limits and credit limits. A 'position' limit is typically a simple notional figure, set into either the relevant trading application or the gateway through which the order flow passes to the exchange, and applied on an intra-day basis. A 'credit' limit is an exposure level calculated by reference to the aggregate value of a customer's positions as well as any collateral provided by that customer, and hence is a more complex concept.

For cash securities trading settlement is generally conducted on a delivery versus payment ("DVP") basis such that stock and cash are exchanged within a set period following execution of the transaction. Where settlement is conducted on a DVP basis, UBS does not consider that credit risk exists and hence 'credit' limits are not relevant.

In addition for exchange traded derivatives, clearing brokers perform credit limit assessments of their customers on a Trade Date + 1 ("T+1") basis. Credit limit usage can only be determined after close of trading once all allocations and reconciliations have been performed to ensure that an accurate and complete picture of a customer's overall position can be obtained.

Furthermore a credit limit is applied at the overall client relationship level and not necessarily at the individual account level. Certain customers, including those involved in statistical arbitrage trading, have on-exchange derivatives positions which off-set against off-exchange positions, either in a cash security or in an over-the-counter ("OTC") derivative. These off-setting positions may be captured within entirely separate trade capture and risk management systems within that firm or potentially even held with another firm altogether. In consequence therefore UBS considers that attempting to implement a pre-trade 'credit' limit filter would be impractical.

UBS does consider that for both DMA and DEA business some form of simple notional intra-day position limit, operating as a hard limit within a system or gateway is sufficient for controlling the risk of large position exposure, in conjunction with adequate and timely post-trade information made available to risk managers. A 'credit' limit that operates as a validation of collateral versus overall exposure however, would be extremely complicated and costly to implement, would create too much latency from the perspective of speed of execution, and ultimately is not necessary.

Q. As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

UBS considers that pre-trade limits and post-trade information should be seen as complimentary. Complete and timely post-trade information provided to a firm will enable the risk management function within that firm to utilize the pre-trade limits present within the electronic trading systems or gateways, to control or limit the customer's trading activity where necessary. UBS considers that the actual pre-trade filters which should be available do not need to particularly sophisticated and that per order or 'fat finger' type limits over price or quantity for a particular order, coupled with simple intra-day position limits, will provide an adequate means of mitigating risk without unduly restricting the speed of execution.

For example an intra-day position limit, as mentioned above, may be used by the risk management function to control the trading of a customer where it has determined that the customer's overall exposure is approaching pre-determined limits or should otherwise be restricted. Use of post-trade information in conjunction with –pre-trade filters, allows the member's risk management function to determine whether additional control is required and at what level, from a more informed position. Following on from this it is important that the risk manager retains the ability to stop or control the customer's order entry / trading capability, where this is deemed necessary, and the exchange should provide the functionality to allow this.

Q. Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

UBS considers that for DMA business the pre-trade limits should be implemented and controlled at the member level. For DEA type access pre-trade limits should be implemented and controlled at either the member level or the exchange level, **but not both**. Implementation of pre-trade limits within the member's systems is more feasible in terms of delivery in the short term and would enhance the competitive environment since, from a latency perspective, each member would have a commercial incentive to develop limits that had as little impact on latency as possible. In the event that regulations mandate that limits should be implemented at the member level then these requirements need to be strictly enforced and policed by the exchange or regulator to ensure that the application of the regulations is consistent and fair across all participants.

On the other hand implementation of pre-trade limits at the exchange level will ensure that there is a 'level playing field' for all participants and will be more certain in terms of mitigating systemic risk from direct electronic access. UBS should like to note however that broadly similar or equivalent pre-trade limits should be applied across all exchanges, to prevent certain exchanges allowing unrestricted access and using this to gain a competitive advantage when offering look-alike contracts. In addition it should be noted that consistent implementation of commensurate pre-trade limits at the exchange level across all markets is likely to take much longer to deliver.

Overall however UBS considers that it would be more desirable to implement pre-trade limits at the exchange level, in order to create the 'level playing field' and to prevent systemic risk as noted above.

Q. Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non-DEA business? Please elaborate.

UBS considers that the systems and controls in place for DMA and DEA business should be similar but not entirely identical to those in place for voice execution brokerage business. UBS considers that direct electronic access necessarily entails a higher degree of risk since the presence of algorithmic trading systems creates the capability of entering significantly larger numbers of orders in very short periods of time, than could arise in a voice execution brokerage context. In consequence the types of systems and controls in place should reflect this distinction. For example systems to prevent excessive bandwidth usage or to 'throttle' the message volume transmitted to the exchange's trading system should be utilized for DMA and DEA business, but may not be applicable for non-DMA / DEA type business.

Q. Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to SA?

With regard to DEA type access on SGX-DT (ie sponsored access), UBS considers that while its current risk management systems and controls are adequate, at present SGX-DT does not provide all of the functionality within its trading API, that UBS would prefer to obtain in order to conduct its risk management for DEA. UBS anticipates that the forthcoming introduction of a new OMX-based trading API will provide UBS with more enriched and real-time data.

Q. When a non-clearing market-member places a trade, does the mere fact that the Customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

No – for both DMA or DEA business UBS notes that the fact that a customer is itself a member of a market does not reduce the credit risk to the clearing firm that accepts the trades.

Q. Can intermediaries who receive "drop copies" of their SA Customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

UBS notes that in theory if you have the necessary systems and configurations to receive 'drop copies' these could be used to withdraw any resting orders that had not been executed. Notwithstanding the above it should also be noted that 'drop copies' have other uses and may also be necessary for straight-through-processing and for customers to perform their own internal risk management.

Q. Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem

UBS notes that differences in latency may exist between different electronic access solutions, however UBS does not consider it appropriate that any kind of obligation to make a disclosure of this fact should be mandated by rules or regulations. As part of its customer on-boarding procedures UBS will discuss each customer's specific objectives and requirements, including the level of electronic trading access, if any, that the customer may require. Disclosure of the differences in each electronic access method is likely to form part of these discussions, however UBS does not believe that it is necessary or desirable to include disclosure as a positive requirement of any relevant regulations.

With regard to the issue of equitable access each customer's business model and trading objectives will largely determine the type of electronic access that will be appropriate for that customer. While UBS does agree that it is imperative that each customer should be able, in principle, to utilize each type of electronic access method, each method will involve different levels of cost of deployment, which will need to be passed on to the customer, and as such may make a particular method inappropriate given the customer's business model and trading objectives.

Q. Please describe the minimum operational and technical systems that intermediaries should have in order to manage effectively the DEA that they permit.

For DMA type access UBS considers that the minimum operational requirements should include, but not necessarily be limited to, the following:

- Adequate risk management mechanisms (both pre-trade limits and post-trade information systems);
- Adequate Business Continuity / Contingency arrangements;
- Failover systems, including hot swappable gateways / line handlers / comms lines;
- Adequate procedures for system testing;

Please note that UBS does not consider that system performance or capacity should necessarily comprise part of any minimum operational or technical standards, as this will largely be driven by the amount of investment in hardware that a particular member is able and prepared to make.

For DEA type access this is more likely to be driven at the customer level, however UBS considers that any minimum operational or technical standards applied here should be commensurate with the standards of an exchange member, to the extent that the DEA customer is not otherwise required to be a member of the exchange in its own right.

Response from UOB Bullion and Futures Limited ["UOBBF"]

Besides the questions in the Consultation Paper, the company was asked to respond to the following:

- *For sponsored access, does your firm impose or require your customers to have pre-execution "fat finger" or error prevention filters? Provide examples of such filters.*
  UOBBF: Yes for example maximum order size.
- *Do these filters reside within the customer's own trading system or elsewhere?*
  UOBBF: They reside within the customer's own trading system.

VI. PROPOSED GUIDANCE AND CONSULTATIVE QUESTIONS

A. Introduction

It is the view of SC2 and SC3 that markets and intermediaries should have appropriate policies and procedures in place that seek to ensure that customers granted DEA will not pose undue risks to the market and the relevant intermediary.

In broad terms, with the increasing use of DEA, there is the potential, particularly if proper controls are not implemented, that a customer may intentionally or unintentionally cause a market disruption or engage in improper trading strategies that involve some elements of fraud or manipulation. Unauthorised access is also generally recognised as being a major concern in terms of market integrity and security.

SC2 and SC3 have identified the key elements to be considered in the promulgation of guidance by IOSCO in the DEA area:

(i) Pre-conditions for DEA
(ii) Information Flow
(iii) Adequate systems and controls

Based on the areas identified above, SC2 and SC3 sets forth the following elements that could support principles in the DEA area. SC2 and SC3 invite comments from industry and the public on these matters.

Please indicate in your comments whether they apply to automated order routing systems, sponsored access or direct access by non registrant/non intermediary market members, or all three:

B. Customer Pre-conditions for DEA:

(1). Minimum Customer Standards

POSSIBLE PRINCIPLE: Customers using DEA should be required to meet minimum standards, including:

- **appropriate financial resources;**
- **familiarity with the rules of the market and ability to comply with the rules of the market;**
- **knowledge of the order entry system which the customer is permitted to utilize; and**
- **proficiency in the use of that system.**

- QUESTION: Should IOSCO consider a principle regarding minimum customer standards, and if so, are these the appropriate qualifications for such DEA customers?

UOBBF: Yes, IOSCO should consider a principle regarding minimum customer standards, and the qualifications as listed are appropriate for such DEA customers. Perhaps different minimum standards (e.g. financial resources) should be established for different types of customers, namely, Financial Institution, Hedge Funds, Fund Managers, Corporate and Retail DEA customers. In addition, certain qualifications are hard to measure or assess in practice e.g. customer's familiarity with market rules, knowledge of the order entry system and proficiency in the use of the system and intermediaries can only rely on declaration made by DEA customers.

(2). **Legally Binding Agreement:**

POSSIBLE PRINCIPLE: There should be a recorded, legally binding contract between the intermediary and the DEA customer, the nature and detail of which should be appropriate to the nature of the service provided.

- Do you agree? If not, please explain or elaborate.

UOBBF: Yes

- What are the key points to be addressed in such a contract? *See* section V.B(2) for possible elements that could be included.

UOBBF: all the points as detailed in section V.B(2)

- [SC2: Please consider a question regarding a contractual agreements between markets and sponsored access DEA customers]

(3). Sub-delegation:

POSSIBLE PRINCIPLE: Where a customer of an intermediary is permitted to sub-delegate its direct access privileges directly to another party (sub-delegatee), the intermediary should seek to ensure that its contractual arrangements with its DEA customer

allow it to identify the sub-delegatee if required by a market authority.

- What requirements should be applicable if a DEA customer is permitted to delegate its access privileges directly to another customer (sub-delegation)? For example, should the sub-delegated customer be required to enter into a contractual relationship with the intermediary, the DEA customer and/or the market? If yes, what areas should be covered by such a contract?

UOBBF: The DEA customer who is permitted to sub-delegate its access privileges directly to another customer should be contractually made to comply with all the relevant requirements as if it were the intermediary. We are of the opinion that the contractual relationship should be between the DEA customer and the intermediary with a back-to-back contractual agreement between the DEA customer and its sub-delegated customer.

C. Information Flow

(1) Customer identification

POSSIBLE PRINCIPLE: Intermediaries should disclose promptly to market authorities upon request the identity of their DEA customers in order to facilitate market surveillance.

- Should this information be given only upon request or on a transaction basis?

UOBBF: Upon request.

- What problems, if any, do you have, in obtaining or delivering this information? If problems exist, how could information flow be improved? (*e.g.,* the use of sub-user identifiers for DEA orders on a transaction basis? Other possible solutions?) Please explain.

UOBBF: The DEA customers may be executing for their underlying customers hence intermediaries may need to rely on its DEA customers to provide information in relation to their underlying customers. In addition, the DEA customers and/or their underlying customers may prefer to communicate such information directly to market authorities without going through the intermediaries.

(2) Pre and Post-Trade Information

POSSIBLE PRINCIPLE: Markets should be required to provide member firms with access to all pre and post trade information (on a real-time basis) necessary for intermediaries to implement appropriate monitoring and risk management controls discussed below in section 3.

- Do you agree with this proposed principle? If no, please explain.

UOBBF: Yes

- Are intermediaries receiving sufficient information from markets regarding pending order flow from DEA customers? Please elaborate.

UOBBF: Yes except for sponsored access.

- What is the information that intermediaries deem necessary to receive on a pre- and post-trade basis to perform effective risk management controls? What information should a market provide the intermediary regarding pending order flow and other data in order for such a firm to properly implement pre-trade controls?

UOBBF: For sponsored access, even if a market were to provide pre-trade data e.g. pending order flow to intermediary, it is very difficult for intermediary to implement automated pre-trade controls as the orders will "bypass" the intermediary's pre-trade filters. However, it may help intermediary's risk management to a certain extent as it can monitor such pending orders in relation to the customer's actual risk position and take action to stop out the orders before they are executed, if necessary.

- Is there any specific issue regarding the availability of the pre and post-trade that would deserve further consideration?

D.. Adequate Systems and Controls

POSSIBLE PRINCIPLE: Intermediaries (including clearing firms) should have in place both regulatory and financial controls, including automated pre-trade filters, which can limit or prevent a customer from placing an order that exceeds existing position or credit limits on such a customer.

POSSIBLE PRINCIPLE: Intermediaries shall have adequate operational and technical systems to manage its DEA systems.

- Do you agree that such automated pre-trade filters are desirable and feasible? If not, please elaborate? Please clarify precisely which types of pre-trade filters you deem appropriate. For example, pre-trade filters might range from "fat finger" stop buttons, to more sophisticated filters applying customer position and/or credit limits.

UOBBF: Yes such as maximum order size, max position limit, credit limit.

- Do you believe any distinction needs to be drawn between automated pre-trade filters that merely apply a position limit on such a customer, as opposed to automated pre-trade filters that address the credit exposure for each

customer, and stop or limit trades that exceed such position limits and/or credit exposure, taking into account latency and other factors?

UOBBF: No.

As an alternative to pre-trade filters, some intermediaries and markets believe that post trade controls, performed on a real time basis, can be an effective tool to manage risk involved in DEA transactions. What are the relative merits and drawbacks to such post-trade controls in comparison to pre-trade controls, from both a risk management perspective and the point of view of market participants interested in the fastest possible execution?

UOBBF: Pre- and post-trade controls serve different risk management purposes. They complement and supplement each other. Ideally, both should be instituted. The former is a preventive measure ensuring sufficient position / credit limit before a customer enters an order into the market. After an order is done, continuous monitoring is required in the form of post-trade monitoring so that appropriate action (e.g. force liquidation) can be taken, if necessary, to mitigate risk to the intermediary.

- Should pre-trade controls be at the intermediary or market level or both? Please elaborate. What level of responsibility for risk management of DEA, if any, should be assumed by the market?

UOBBF: Both where the intermediary is primarily responsible for the risk management and the market will play a secondary role.

- Should DEA systems and control procedures (including pre-trade filters and post trade controls), be similar or equivalent to those applied at present to non DEA business. And if so, in what way should they be different?

UOBBF: They should be the same.

- Do markets or the CCP currently provide intermediaries with the functions/systems needed to conduct effective risk management relating to sponsored access?

UOBBF: No

- When a non-clearing market-member places a trade, does the mere fact that the customer is a market-member reduce the credit risk to the clearing firm that accepts the trades?

UOBBF: Not necessarily. Take for instance, a financial institution ("FI") and a non-FI market member, credit risk to the FI who is not a market member may be lower.

- Can intermediaries who receive "drop copies" of their sponsored access customer's orders stop the orders prior to execution? If not, what is the utility of such a tool?

UOBBF: Yes via a pre-agreed arrangement with the exchange or market whereby designated persons from an intermediary can instruct the exchange/

market to suspend the customer's sponsored access and/or cancel the sponsored access person's pending orders.

- Do differences in latency raise any concerns that should be addressed by means other than disclosure and equitable access? If so, please explain the problem and a potential response.

UOBBF: Differences in latency will affect an intermediary's competitiveness. Hence it is important that all intermediaries comply with applicable standards / requirements as a rule to ensure equal playing field across all intermediaries.

6. **Appendix I**

SC2 used the following definitions:

"Direct Electronic Access (DEA)": DEA refers to the process by which a person transmits orders on their own (i.e., without any handling or re-entry by another person) directly into the market's trade matching system for execution.

"Participant" – a person that is granted access to the market to transmit orders using DEA, whether or not a licensed or registered intermediary.

"Person": Use of the word "person" is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

"Sponsored Access": – An electronic access arrangement under which an intermediary Participant permits a customer to transmit orders through its own system and gateway directly to the trading system or, less commonly, to send orders electronically to the trading system through a service bureau pursuant to an arrangement between the vendor and the intermediary Participant(s).

"Sponsored Access Person": A Person who contracts with one or more Participants for Sponsored Access to the market.

"Market" refers to exchanges and alternative trading facilities.

SC3 used the following definitions:

"Access through intermediary or third party infrastructure": An electronic access arrangement under which a customer of an intermediary (such as a broker or broker-dealer) is able to transmit orders to one or more markets' order matching system for execution through the intermediary's own infrastructure and gateway directly, or to send orders to the market through a service bureau's IT infrastructure, pursuant to an arrangement between the vendor and the intermediary.

“Access without utilization of intermediary infrastructure”: This refers to the process by which a customer (such as a fund manager) of an intermediary (such as a broker or broker-dealer), transmits orders on their own (i.e., without any handling or re-entry by the intermediary), directly into one or more markets’ order matching system for execution. While the customer may be using the intermediary’s “tag” number, or name, the order does not go through the intermediary’s infrastructure (including the intermediary’s order routing IT systems). Such direct access, without utilization of the intermediary’s infrastructure, could be referred to as “back-door” access to the market.

"Customer" – a person that is granted access to the market to transmit orders using *either* access through an intermediary’s infrastructure, or access without utilization of the intermediary’s infrastructure, whether or not that person is a licensed or registered intermediary.

“Person”: Use of the word “person” is used for convenience and includes individuals, as well as entities such as corporations, limited partnerships etc.

“Market” refers to registered or licensed exchanges.