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.