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CONSULTATION ON THE REGULATION OF ELECTRONIC TRADING

RESPONSE BY LINKLATERS ON BEHALF OF 25 FINANCIAL INSTITUTIONS AND INDUSTRY ASSOCIATIONS

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1 Introduction

- **1.1** This is a response by Linklaters on behalf of the group of 25 financial institutions and industry associations listed in the Annex to this submission (the "**Group**") in response to the Consultation Paper published on 24 July 2012 by the Securities and Futures Commission (the "**Commission**") entitled "Consultation paper on the regulation of electronic trading" ("**Consultation Paper**").
- **1.2** The Group agrees with the Commission's goals of ensuring the stability and integrity of financial markets and welcomes the opportunity to respond and contribute to the points raised in the Consultation Paper. As both users and providers of electronic trading services and facilities, members of the Group support practical, well-defined measures to deter manipulative or disruptive market behaviours and to ensure fair and orderly markets.
- **1.3** The Group's submission has been structured into three sections:
 - (i) A summary of the issues that the Group believes are key;
 - (ii) A section that provides background and context for electronic trading;
 - (iii) Responses to the specific questions raised in the Consultation Paper.
- 1.4 Given that the subject matter and context of the Consultation Paper is highly technical and complex both in its nature and implications, the Group would welcome the opportunity to meet with the Commission to discuss and provide further input and context to this response. The Group recognises that the rules introduced by the Commission in this area will be critical to the development of the industry and, as such, it is essential that they reflect both the current realities of electronic trading and provide the flexibility to cater for future developments. Accordingly, to the extent that Group members can assist the Commission in developing the regulatory framework, they would be very keen to do so. In this respect the Group would willingly provide representatives from both compliance and sales/trading disciplines to assist in this dialogue.
- **1.5** The Group would like to extend its thanks to the Commission for the opportunity to contribute to this Consultation Paper and remains at the disposal of the Commission.

2 Key Issues Summary

- 2.1 Definitions. The Group considers that various definitions used within the Consultation Paper can be subject to misinterpretation, thus presenting a risk of misapplication of any proposed regulation. The Group would suggest that there be greater precision in the definitions to ensure that all market intermediaries and participants are able clearly to understand and correctly apply any proposed regulation. The majority of Group members considered that such clarity could best be achieved through FAQs which would also have the advantage that they can be easily modified/supplemented should this be necessary to reflect industry developments. However, there was not full consensus on this, and some members felt that including the required clarification in the new Code of Conduct provisions would be preferable (so long as the required flexibility could be ensured).
- **2.2** Scope of Responsibility. The Group has some concerns as to the degree of responsibility that can reasonably and practically be placed on an intermediary, given its particular role in the trading process. The Group is concerned that some of the core

proposals in the Consultation Paper appear to be based on assumptions about the amount of information and control that intermediaries have with respect to "electronic trading" without taking into account the diversity of arrangements to which the proposed requirements may apply.

- 2.3 Leveraged Foreign Exchange. It is not clear to the Group why the proposed rules have been specifically extended to leveraged foreign exchange ("LFX") trading. While LFX trading by clients (amongst other activities) may to some extent be facilitated via an internet-based interface, LFX trades are generally bilateral arrangements between the client and its bank/LFX trader. The Group suggest that the scope of the proposed rules be focused on exchange/ATS traded products.
- **2.4** Algorithms. The Group recognises the objective of introducing additional risk management controls and measures regarding algorithmic trading, and recommends that the definition of algorithms be clearly scoped so as to avoid the regulation unintentionally applying to all forms of order and trade automation and processing.
- **2.5** Intermediary Infrastructure. The Group draws attention to the market practice of using systems, facilities and networks that are owned and operated by third parties that are outside the direct control of the regulated intermediary, and in the context of the proposed rules suggests that this be taken into account when considering what constitutes an intermediary's own infrastructure.
- 2.6 Systems Development. Many intermediaries use systems that are designed and developed by third parties. In these situations, it may be practically difficult to apply the Commission's requirements with respect to systems development and retention of design information, as the Hong Kong regulated intermediary may have limited access to this information.
- 2.7 DMA and sub-delegation DMA. The Group requests clarification on the standards that the Commission expects intermediaries to impose on clients using DMA services, and in particular recommends that professional and institutional clients be presumed qualified to access DMA channels. Additionally, the Group notes that the Commission's proposed prohibition on sub-delegation of DMA by clients that are not licensed intermediaries or overseas securities or futures dealers could infringe on legitimate and commonplace uses of DMA services today.
- 2.8 Inappropriate Trading. The Group recognises the importance of detecting, preventing and notifying the relevant authorities of any abusive or manipulative practices. However, the Group notes that, aside from information about the client's trading activity that it transacts, an intermediary generally has very limited information about a client's investment intent or about trading activities which are conducted through other brokers. Accordingly there is a practical limit as to the extent to which intermediaries can detect and prevent market misconduct and other inappropriate conduct, outside of situations where orders clearly breach certain quantitative thresholds.

3 Background and Context

3.1 The Consultation Paper appears, at first sight, to be concerned with electronic trading where the absence of significant human intervention in the trading process may need additional appropriate controls in the interests of further improving market integrity. However, as the Commission is aware, the types of electronic trading facilities available and used vary considerably, and the controls needed should reflect this fact. As such, it

may be useful to consider the role intermediaries play in various "electronic trading" arrangements:

- (a) Where an intermediary develops and uses its own electronic trading systems (potentially including "algorithmic" trading systems as defined in the Consultation Paper) for the origination and execution of its own trades, it has a high degree of control over the trading process and infrastructure that it uses. Therefore, it may be reasonable to consider the introduction of additional responsibility on the firm in respect of the trades it is generating and the systems it uses to execute them. In practice, however, trading via electronic systems often does not follow this "unitary" model and is instead carried out by multiple entities, with the beneficial owner of trades relying on other intermediaries to provide infrastructure and services to help execute the order. This has a significant impact on the ability of intermediaries to comply with the proposals set out in the Consultation Paper.
- (b) For example, where a firm uses a trading system developed by a third party, it may have limited or no control over the design and development of the trading system. When a firm "purchases" a trading system from a third party, it is generally only obtaining a license to use that system for a particular purpose and does not have broader rights to the underlying intellectual property. The level of examination into the design and development of third party systems that is envisaged by the Consultation Paper would go far beyond what systems providers are likely to permit.

A more practical and effective approach may be to require the purchaser to conduct a reasonable level of diligence and testing on the system to determine whether it is fit for purpose and performs as intended and, upon installation and use, to perform reasonable monitoring of the system's performance. The intermediary would therefore retain responsibility for its use of the system, but only in respect of factors that it can reasonably control.

- (c) Conversely, where an intermediary has developed an algorithm or other electronic trading system for use by a client, it may be reasonable to make explicit the responsibilities on the intermediary with respect to how the system is developed and documented. However any subsequent use of or modifications to the system (to the extent permissible) may be beyond the intermediary's control and ability to monitor.
- (d) Where an intermediary is providing DMA services, the question in our view becomes, what responsibilities should apply to a firm that is serving as a conduit for trades generated by a third party? The fact that trading is carried out via DMA in many ways presents the same types of issues as trading carried out via non-DMA channels. In this respect, the Group is of the view that the statement in the Consultation Paper that an intermediary is "ultimately responsible for the orders sent through its electronic trading system irrespective of the party that initiates the order"¹ is unrealistic in that it implies that the <u>order originator</u> do es not have responsibility for the trades it initiates. The Group does of course accept that

Consultation Paper para.26. We note the Commission has cited the IOSCO Principles for Direct Electronic Access to Markets ("IOSCO Report") in support of this statement. However, we would also note that Principle 2 of the IOSCO Report states that "A fundamental concern . . . is the need to ensure that the intermediary's customer will comply with market rules [a]s a practical matter, such compliance will be facilitated through legally binding requirements on a DEA customer". We believe this is consistent with our view that regulators must not place the burden for ensuring compliance with market rules solely on intermediaries instead of order originators.

intermediaries have responsibilities for trades that pass through their systems, but this responsibility must be in relation to things that they can reasonably monitor and control.

To that end, we believe that it is important to understand that while intermediaries can and do implement certain controls on the orders flowing through their systems, there are significant practical limits on the ability of these controls to detect all forms of "inappropriate" trading. At the pre-trade level, firms may be able to implement certain filters to detect anomalous quantity or pricing inputs and other basic quantitative controls. These controls may need to be calibrated to take into account different clients' legitimate trading needs and other characteristics. For example, institutional clients may need more leeway to engage in actions that may raise red flags for retail or other less sophisticated clients. However, unless a trade exceeds one of these pre-defined quantitative measures, an intermediary would generally not have a basis to identify a trade as potentially inappropriate. Intermediaries generally do not have any information as to a client's investment intent or objectives and accordingly would not be able to identify or prevent market misconduct absent trading behaviour that exceeds quantitative triggers or raises obvious concerns. Moreover, an intermediary will not have any information about trading conducted through other firms, nor can any one intermediary effectively police a client's position limits or other disclosure requirements. Finally, identifying abusive or manipulative practices may require analysing and searching for detectable patterns of activity and behaviour. This significantly limits what can reasonably be expected to be detected pre-trade and post-trade by any individual intermediary, irrespective of whether the trading is conducted via DMA or otherwise.

A clarification of the types and nature of "inappropriate" trading behaviour that the Commission is concerned with is therefore key, and the Group would recommend further discussion with the Commission.

- **3.2** Accordingly, the Consultation Paper appears to be addressing a wide variety of "electronic trading" arrangements involving diverse policy considerations. Having regard to this, and the fact that electronic trading services involve many technical issues, the Group respectfully suggests that further discussions with the industry on the issues involved will be important to ensure that any new rules and guidance reflect a full understanding of the variety of electronic trading systems used in practice and how firms currently seek to address the issues the use of these systems raises. We would be happy to arrange a meeting with the Group at the Commission's convenience.
- **3.3** We discuss in more detail below the Group's response to the questions set out in the Consultation Paper.

4 Responses to specific questions in the Consultation Paper

4.1 Q1. Do you agree that the proposed scope of the regulation of electronic trading is appropriate in terms of

(i) the types of electronic trading, which include internet trading, DMA and algorithmic trading?

(ii) the types of products primarily covered by these proposals namely securities and futures contracts that are listed or traded on an exchange?

(iii) the persons to whom the proposals apply?

Definitions of terms

The Group notes that the definitions of "electronic trading", "internet trading" and "DMA", are framed very broadly in the Consultation Paper, and the Group queries whether the terms are sufficiently precise. For example, as currently stated, "electronic trading" would seem to capture <u>any</u> type of trading infrastructure where trades are inputted and/or processed electronically in some way (including third party trading and market information terminals and related equipment). This would also appear to include firms' internal crossing engines that may already be regulated as automated trading systems.

The definition of "internet trading" could be read to include a broad range of platforms, technologies and methods, from order routing systems (with some form of human intermediation), to fully automated ATS's, to potentially any system where client orders are routed to a market or execution venue via the internet or using internet based technologies and standards. It appears that the Commission's intention is to cover external public internet technologies through which clients may place orders with their intermediaries but not to cover arrangements where clients directly send their trades electronically for execution on a market or ATS. The Group suggests that this be clarified.

In respect of DMA, the Group is unsure of the purpose for the carve-out for trades "initiated by way of internet trading", particularly given the broad scope given to the definition of "internet trading". It may well be the case that a client is given DMA access and enters its trades via a system that would fall under "internet trading". For example, we understand there are arrangements in the industry through which retail/individual clients can use an internet-based trading facility to enter orders which are then electronically routed to market via a DMA channel. We would appreciate clarification from the Commission if such arrangements would constitute a DMA service under the proposed rules.

The Group notes that paragraphs 15 and 16 of the Consultation Paper indicate that the Commission will prohibit DMA arrangements where clients place orders directly on a market "without going through the intermediary's infrastructure". The reference to "intermediary's infrastructure" would seem to indicate that the intermediary must actually own the infrastructure that is used. In practice, there are various arrangements under which the intermediary does not itself own the infrastructure through which trades pass but nonetheless retains pre-trade controls, including the ability to unilaterally halt the client's trading activities. These arrangements may include co-location facilities offered by exchanges, gateway products owned by exchanges and third party technology vendors, third party telecommunications networks, and other arrangements where the intermediary may not have technical ownership of the trading infrastructure. Given that the intermediary retains ultimate control over the client's use of the connection, the Group strongly believes that the proposal should be refined to make clear that these types of arrangements fall within the term "intermediary's infrastructure" and will continue to be permitted. For the sake of clarity, the Group is not opposed to a ban on true "naked access", where an intermediary facilitates a client's electronic connection to a market with no form of preexecution control by the intermediary.

For "algorithmic trading", the reference in the definition to "computer generated trading created by a pre-determined set of rules" is very broad and is likely to capture relatively simple automated trading processes and "strategies" such as automated hedges. These

types of systems and processes are not typically considered under market convention to constitute "algorithmic trading" systems. By contrast, the Commission's commentary in the Consultation Paper suggests that its concern lies with "complex trading algorithms" executing "sophisticated trading strategies", which would appear to exclude the relatively simple automated strategies mentioned above, although this is not reflected in the proposed definition. As computer-generated trading systems involve varying degrees of complexity, the Group recommends that the Commission clarify the type of systems it intends to include within "algorithmic trading" and, as necessary, narrow the definition accordingly.

As mentioned in the Key Issues Summary above, the majority of Group members (although not all) consider that FAQs may be the best mechanism for achieving the required clarity in definitions given that these may easily be changed or supplemented to reflect future developments in electronic trading.

Types of products covered and territorial scope

The Group generally agrees with the proposal to apply the proposed rules to exchangetraded securities and futures contracts. However, the Group notes the following:

- (iv) If the primary rationale for the proposed rules is to protect the integrity of the Hong Kong markets (i.e., the Stock Exchange of Hong Kong, the Hong Kong Futures Exchange and approved ATS's), then the proposal should focus on these markets. That is, intermediaries would only be subject to the requirements to the extent (a) they facilitate electronic trading for clients (via internet trading or DMA services) that is executed on the Hong Kong markets; (b) they conduct algorithmic trading themselves on the Hong Kong markets; or (c) provide algorithmic trading systems to other Hong Kong intermediaries or other persons with the knowledge or understanding that the systems will be used for trading on the Hong Kong markets. This is similar to the focus in other areas of the Code of Conduct (for example, in respect of research activities).
- (v) Similarly, it is not clear why the proposed rules have been specifically extended to leveraged foreign exchange ("LFX") trading. While LFX trading by clients (amongst other activities) may be facilitated via an internet-based interface, LFX trades are generally bilateral arrangements between the client and its bank/LFX trader. As such, the market integrity concerns that the Consultation Paper seeks to address do not appear to be relevant for LFX trading. Therefore, the Group believes that an explanation of the Commission's concerns would be helpful.

Further, given that HKMA-licensed banks are exempted from the Type 3 licensing requirement and are not subject to the Commission's direct supervision for LFX trading activities, we assume that, to the extent the proposed rules will cover LFX trading, the Commission will engage with the HKMA to ensure that the HKMA will take a consistent approach for any comparable requirements that will apply to banks.

4.2 Q2. Do you agree that an intermediary should be ultimately responsible for the orders sent to the market through its electronic trading system and for the compliance of the orders with applicable regulatory requirements? If not, why not?

The Group agrees and accepts that intermediaries that provide electronic trading services have a responsibility to ensure, to the extent reasonably possible, that their systems are

not being misused or that trades being placed through their systems are not having a disruptive effect on the market. The Group also takes some comfort from the Commission's statement in paragraph 28 of the Consultation Paper that "It is not our intention to hold an intermediary liable for all market misconduct or other transgressions that involve orders that go through its electronic trading system".

Nonetheless, the Group has concerns that the requirement as expressed in proposed paragraph 18.3 of the Code of Conduct contains no such limitation or other provision to reflect the reality that, in many situations, inter mediaries cannot in practice detect or prevent all client misconduct. Furthermore, the reference to "applicable regulatory requirements" is potentially very broad and may cover requirements that intermediaries may not be in a position to monitor (such as position limits or substantial shareholder controller thresholds).

Whilst market participants carry out various degrees of due diligence on clients when providing electronic trading services, and clients contractually represent and warrant that they are aware of and will continuously abide by all relevant rules/regulations relating to markets that they trade, the practical reality is that once an electronic connection to the market is provided to the client, it is impossible for any intermediary to determine whether a client has improper intent or is being reckless or negligent in engaging in certain trading activity. As an example, if a client who has been provided with electronic access to the market is minded to pre-arrange a trade, there is virtually nothing the registered and licensed person can do to detect or prevent that. Furthermore, where a client is using multiple execution channels (such as multiple brokers), no one intermediary will have a complete view as to the client's trading activity. Please also see our response to Q7 and Q8 in section 4.6 below.

As currently stated, the requirement that intermediaries have "ultimate responsibility" for the compliance of orders with "applicable regulatory requirements" appears to impose a form of strict liability on intermediaries for any and all violations committed by their clients. The Group assumes this is not the Commission's intent, and it suggests that that requirement be modified such that intermediaries be responsible for implementing systems and controls to detect trading activities by clients that are having a disruptive effect on the market to the extent reasonable and practicable given the information available to the intermediary in the ordinary course of its dealings with the client.

4.3 Q3. Do you agree that an intermediary should effectively manage and adequately supervise the design, development, deployment and operation of the electronic trading system it uses or provides to clients for use? If yes, are the proposed requirements sufficient? If not, why not?

The Group generally agrees that intermediaries that design and implement their own electronic trading system (whether for their own use or the use of their clients) should take reasonable steps to ensure the reliability and integrity of the system. However, the Group has the following comments about this requirement:

(a) In principle, the Group accepts the proposal that there should be at least one responsible officer ("RO") or executive officer ("EO") (as those terms are defined in the Securities and Futures Ordinance) who should be responsible for the overall management and supervision of the electronic trading system.² The Group would however point out that institutions often use multiple electronic trading systems

² Consultation Paper, para. 29.

with different trading desks utilising different systems (depending on their trading strategy). In such a set-up, it would not be practical for a single RO/EO to oversee all of the systems used by the intermediary and oversight of the operation of particular trading systems would accordingly need to be vested in different ROs/EOs. Given that some trading systems are very technical in their operation, the relevant RO/EO may be heavily reliant on other individuals who have specialised technical knowledge relevant to the particular system, and we assume that this limitation would be reflected in the Commission's expectations of the responsibilities of the relevant ROs/EOs.

- (b) The requirements in respect of the design and development of an electronic trading system may not be practical where the system was designed/developed by one or more third parties. As noted previously, the design and development of electronic trading systems is highly technical and proprietary. Where a firm is using a system developed by another party, it simply may not be possible for the firm to "manage" or "supervise" its design and development. The Group would therefore recommend that the requirements introduced by the Commission reflect this limitation.
- (c) As currently drafted, the requirement stated in paragraph 30 of the Consultation Paper and paragraph 1.1.4 of the Draft Schedule 7 could be read to impose strict liability on a firm for any failure or misuse of its electronic trading system, whether the failure or misuse was within the reasonable control of the intermediary. The Group therefore recommends that this be modified to require a licensed or registered person to take "reasonable steps to assign qualified staff, expertise, technology and financial resources to the design, development, deployment and operation of the electronic trading system".
- (d) Where an intermediary provides an electronic trading system to a client, the subsequent operation and modification of the system may be outside the control of the original intermediary. Therefore, the intermediary should not be required to monitor or approve the client's deployment or operation of the system or any subsequent modifications to the system made by the client.
- **4.4** Q4. Do you agree that an intermediary should ensure the integrity of the electronic trading system it uses or provides to clients for use, including the system's reliability, security and capacity, and have appropriate contingency measures in place? If yes, are the proposed requirements sufficient? If not, why not?

The Group reiterates its concerns expressed in relation to Q2 regarding intermediaries' responsibility to prevent the execution of orders that are not compliant with "applicable regulatory requirements" as stated in paragraph 32 of the Consultation Paper. As noted above, this potentially covers a wide and undefined range of regulatory requirements applicable to clients that intermediaries may not be able to monitor. The Group would therefore recommend guidance from the Commission as to the types of regulatory requirements it expects intermediaries to be able to monitor in this regard.

In respect of the other issues raised in this section:

System reliability

- (a) The requirement to test modifications to electronic trading systems can cause significant problems for intermediaries that utilise technology provided by vendors and/or technology that is provided and used on a regional/global basis. Market participants often use systems that are implemented across multiple jurisdictions that have varying degrees of tailoring for local markets where orders are taken or executed. There will be a large number of "modifications" made to global platforms that will have no impact or bearing on the functionality of the system as it relates to its operation for the Hong Kong market. As such, there would not be scope for the Hong Kong intermediary to carry out testing as directed by the proposed requirement. Accordingly, the Group recommends that the proposed system reliability requirements as they relate to modifications only apply to modifications in respect of electronic trading systems used in Hong Kong for Hong Kong listed products.
- (b) The Group suggests that the requirement to test system modifications also be subject to a materiality threshold, as electronic systems are continually subject to adjustments and updates for which re-testing may be unfeasible.
- (c) It would also be helpful for the Commission to clarify the types of situations that it considers to be a "material service interruption" or "significant issue" relating to a system requiring reporting. For example, it may be more practical to limit the reporting requirement to events or occurrences that have a reasonable prospect of causing material detriment to an intermediary's clients or to the market.
- (d) To enhance system reliability, the Group believes it would be useful for the exchange to implement testing facilities that would allow intermediaries to safely assess how their electronic trading systems may interact with the market under various conditions. The Group would be happy to facilitate further discussions with the Commission and Hong Kong Exchanges and Clearing Ltd. regarding the feasibility and scope of any such testing facility.

System security

- (e) The Group agrees that electronic trading system providers should employ means to ensure the security of their systems. However, the Commission should be aware that access to electronic trading systems is often granted on a client-firm basis, in which case intermediaries would not be able to validate the identity of users at an individual level (provided of course that they access the system via proper firm credentials/access channels). It would not be commercially feasible to require intermediaries to impose individual user-level access as this would deprive their clients of the flexibility to determine which of their employees has access to the system.
- (f) Further, there are practical limitations on the extent to which intermediaries can prevent all forms of unauthorised access, particularly where it is facilitated by authorised users (e.g., via the sharing of passwords). Similarly, data transmitted through third-party telecommunication networks will be subject to the security measures of that network operator, which the intermediary will of course not be in a position to control. Therefore, the Group would recommend that the proposals on security be clarified such that intermediaries are responsible for taking such reasonable security measures as are within their control.

In relation to system testing more generally, the Group notes that no amount of testing or planning can guarantee with absolute certainty the reliability, capacity or security of any electronic system. Therefore, the Group recommends that the proposed requirements in this section be subject to a reasonableness standard such that intermediaries that have taken reasonable, good faith measures to ensure the reliability and capability of their systems in light of foreseeable circumstances will not be penalised.

4.5 Q5. Do you agree that an intermediary should keep, or cause to be kept, proper records on the design, development, deployment and operation of its electronic trading system? If not, why not?

Q6. Do you agree with the proposed periods of record keeping? If not, why not?

The Group is amenable to the period of record keeping, however it would appreciate further guidance from the Commission as to the scope and form in which records are required to be kept. The draft proposal for records of "all electronic trading and system activities" is potentially very broad, especially where these systems are "global" or shared within a firm's group or owned and provided by third parties.

The requirement to keep records in respect of the "design and development" of an electronic trading system may not be practical where the system was designed/developed by a third party (see our comment at paragraph 4.3(b) above).

In addition, the Group notes that even where a system has been developed in-house in Hong Kong, as with any type of software development, many of the "records" of its design and development may take the form of technical computer code and similar material that may not be readily comprehensible to laypersons. Given the broad scope of the recordkeeping requirement, this could potentially involve an extremely voluminous amount of material that would be burdensome to retain and potentially of limited value in a subsequent inquiry. Therefore, the Group does not support this proposed requirement without a more precise definition of the types of "readily available" records explaining the design and development of an electronic system that intermediaries would need to maintain on file.

Further to our comment in 4.4(c) in respect of incident reporting the Group also recommends that a clear materiality threshold be applied to any documentation required regarding "system incidents", "system delays" and the like.

Finally, the Group would suggest that any record keeping requirement in respect of the design and development of electronic systems (if not required today) should not apply retroactively to systems that were developed and implemented before proposed rules come into effect. Any such "grandfathering" would of course not affect intermediaries' obligations to create and preserve records for activities going forward (e.g., in respect of trading, system modifications, etc.).

4.6 Q7. Do you agree that, in providing internet trading or DMA services, the proposed pre-trade controls should be put in place by an intermediary? If yes, are the proposed requirements appropriate? If not, why not?

Q8. Do you agree that, in providing internet trading or DMA services, an intermediary should conduct post-trade monitoring to reasonably identify any order instructions and transactions which may be manipulative or abusive in nature? If not, why not?

As discussed previously, the Group has significant concerns about the extent to which intermediaries can be expected to monitor and prevent client trading that violates "applicable regulatory requirements". As a general matter, intermediaries can implement certain filters that suspend trading that exceeds pre-set quantitative parameters. These include, for example:

- "fat finger" controls logic that rejects orders that appear to be erroneous due to significant deviations in price or quantity;
- limitations on financial exposure to the client;

Because these controls are based on pre-set, numerical values, they are by nature limited in their flexibility and can only potentially detect the particular harm for which they are designed. In this respect, there is a limit to their precision. For example, in respect of "erroneous" trades, unless the trade is clearly outside reasonable price or quantity bounds, it is very difficult for an intermediary to determine that the trade was in "error", as this requires an understanding of the client's intent and trading strategy that is generally not available to the intermediary without human intervention, which of course then undermines the utility of the system.

Moreover, the experience of the Group is that there is not a "one size fits all" approach to trading filters, as the standards that may apply to one client may not be appropriate for another, and even the same client may require different tolerances depending on the market(s) and instrument(s) in question.

Additionally, as noted previously, looking at any one trade or series of trades in isolation is of limited value given that market misconduct and other forms of "inappropriate" trading often requires detection of a pattern of behaviour and the consideration of information that is not available to intermediaries pre-trade or even post-trade.

In light of this, the Group would welcome a discussion with the Commission to better understand its primary areas of concerns in this regard and the types of pre and post-trade controls that it accordingly expects intermediaries to have in place given the constraints discussed in this response.

In respect of post-trade controls, the Group also notes that, to its knowledge, all post trade monitoring systems commonly used in Hong Kong operate on a T+1 (or sometimes T+2 due to system limitations), as opposed to a real-time, basis. We assume that this is sufficient for purposes of satisfying the Commission's requirement that the intermediary take "immediate" action upon identification (on T+1 or 2) of suspected manipulative or abusive behaviour.

At a more general level, the Group believes it would be useful to consider the issue of trading controls from start to finish – that is, considering not only what role intermediaries can take, but what additional controls or systems can be implemented, say, at the level of the exchanges and other venues. As noted, individual intermediaries only have visibility as to a client's trading activity that is transacted through that particular intermediary. Clients can therefore, should they be so inclined, circumvent intermediary-level controls by using multiple execution channels. The introduction of additional controls at the level of the exchanges and other venues could provide more comprehensive protection to market integrity. These controls could include automated circuit breakers designed to help protect against "flash crash" type events. Additionally, it may be worth considering whether adjustments to the exchange trading rules in respect of erroneous trades would be helpful

in mitigating market disruption events. Therefore, it may be useful for the Commission to work with Hong Kong Exchanges and Clearing Ltd. and intermediaries to discuss possible initiatives, at least as far as Hong Kong listed products are concerned.

Finally, it is the Group's understanding that the Commission's intention is that the proposals on algorithmic trading would not apply where an intermediary provides DMA to a client that operated its own algorithmic trading system (although the requirements relating to DMA would of course apply to the intermediary). In such circumstances the intermediary providing DMA services may not be in a position to know whether a particular client's orders are ultimately being generated by an "algorithmic trading" system (as currently defined) or otherwise. Given this, the Group suggests that the Commission clarify this point in the final proposal.

4.7 Q9. Do you agree that an intermediary should establish minimum client requirements for its DMA services and assess whether each client meets the requirements before granting DMA services to a client? If not, why not?

Given that DMA services may be provided to a wide variety of clients, the standards for client qualifications are currently very broad (e.g., "proficient and competent"), and the requirement to vet DMA clients could be quite burdensome unless clearer standards are set. Substantially more detailed guidance from the Commission would be helpful as to what information firms are meant to obtain about their clients and what standard they should be held to pursuant to paragraph 49 of the Consultation Paper. This being said, the Group notes that where clients are professional/institutional investors, they are likely to object to a detailed vetting process. As such, the Group strongly suggests that there be a presumption that institutional and professional investor clients are qualified to access DMA services.

The minimum client requirements should also only apply to the direct client of the intermediary, as the intermediary will not necessarily have visibility as to the capabilities of any underlying clients the direct client is serving. Similarly, the vetting of a client, to the extent required, should be required only at the client firm level, as the intermediary typically will not have individual user-level visibility.

4.8 Q10. Do you agree that an intermediary should not allow its client to sub-delegate the DMA services to another person unless the client is a licensed or registered person or an overseas securities or futures dealer? Do you agree with the proposed definition of "overseas securities or futures dealer"? If not, why not?

In respect of the sub-delegation limitation, the Group recommends that the concept of "sub-delegation" be more precisely defined to limit the scope of arrangements that would fall within the definition. If, for example, sub-delegation covers any situation where a DMA client's underlying client connects to the DMA system via the client's connection, this could potentially cover a large population of users for which compliance with the requirements may be impractical.

Additionally, the Group observes that restricting intermediaries from allowing clients to subdelegate where the clients are not "overseas securities or futures dealers" may be overly narrow. In the case of fund management, for instance, while investment managers/advisers executing trades on behalf of fund entities may or may not be required to be licensed or registered as asset managers in their respective jurisdictions, they are unlikely to be required to be licensed/registered as a securities or futures dealer and therefore would not qualify as an overseas securities or futures dealer. Accordingly, as currently proposed, where the DMA agreement is with a fund manager, it could not subdelegate its DMA access to an affiliated sub-manager. Additionally, in some jurisdictions, certain entities may trade via DMA facilities on an unlicensed basis pursuant to exemptions from local licensing requirements (e.g. proprietary traders) and provide access to others, e.g. their affiliates. The proposal would prohibit such an arrangement. Therefore, the Group recommends that sub-delegation also be permitted for institutional and professional investors, consistent with our comment to Q9.

4.9 Q11. Do you agree that an intermediary should establish and implement effective policies and procedures to reasonably ensure that persons involved in the design and development of, or approved to use its algorithmic trading system and trading algorithms are suitably qualified? If not, why not?

The Group reiterates its comments to Q3 in response to this question, in particular:

- (a) That where an algorithmic trading system is purchased from or provided by a third party, the intermediary may have limited control over or access to the design and development of the system;
- (b) That any requirement on an intermediary (for example, in respect of its using "adequately trained" and "suitably qualified" personnel in the design of a system) should be deemed satisfied if the intermediary acted reasonably under the circumstances; and
- (c) That where an intermediary sells an algorithmic trading system to another person, it should not be responsible for subsequent modifications to the system.

Additionally, the Group would suggest the following:

- (d) It would be helpful if further guidance could be provided by the Commission as to the type of qualifications and training it expects for "qualified" staff who design, develop and use a firm's algorithmic trading system; and
- (e) The requirement to provide training to individual users of an algorithmic trading system should not extend to employees of clients and other third parties who purchase a system. As noted previously, intermediaries typically do not have access to information about individual users (who may of course change over time). Therefore the Group believes that an intermediary's responsibility in this respect should be regarded as discharged where it has provided a client with sufficient information about an algorithmic trading system to enable the client to adequately train its own staff on the characteristics and operation of the system.

4.10 Q12. Do you agree that an intermediary should ensure that the algorithmic trading system and trading algorithms it uses or provides to clients for use are adequately tested to ensure that they operate as designed at all times? If not, why not?

The Group reiterates its previous comments to Q4 regarding the inherent limitations on testing of any electronic system, including algorithmic trading systems and the usefulness of an exchange-hosted facility for the testing of electronic trading systems.

Please refer to section 4.4 of this response.

4.11 Q13. Do you agree that an intermediary should have effective controls to ensure the integrity of its algorithmic trading system and trading algorithms and that they

operate in the interest of the integrity of the market? If yes, are the proposed requirements for risk management sufficient? If not, why not?

The Group reiterates its previous comments to Q7 and Q8. Please refer to section 4.6 of this response.

4.12 Q14. Do you agree that an intermediary should keep, or cause to be kept, proper records on the design, development, deployment and operation of its algorithmic trading system and trading algorithms? If not, why not?

Q15. Do you agree with the proposed periods of record keeping and details of the records to be kept? If not, why not?

The Group reiterates its previous comments to Q5 and Q6. Please refer to section 4.5 of this response.

4.13 Q16. Do you agree that where an electronic trading system is provided by third party service provider, an intermediary should perform appropriate due diligence to ensure that the intermediary meets the proposed requirements set out in paragraph 18 of and Schedule 7 to the Code of Conduct in its use of the system? If not, why not?

It is unclear to the Group what types of "due diligence" measures would be sufficient to satisfy this requirement. Given that the development of electronic trading systems involves highly sensitive, proprietary technologies, third party service providers are extremely unlikely to submit to a detailed, invasive audit of their operations or the design process of their systems. Therefore, it does not seem practical or possible for intermediaries to independently verify that the third party service provider has met all of the requirements set out in the proposal.

Third party service providers will of course provide information about the features, capabilities, general design parameters and infrastructure requirements associated with their systems. Potential purchasers can also consider the third party service provider's general reputation, track record and expertise in developing relevant electronic trading systems. In the Group's view, these are more feasible factors for intermediaries to consider when determining whether a potential electronic trading system is fit for purpose, and the Group recommends that any "due diligence" requirement be limited to these types of factors.

Additionally, the Group would be open to discussing the establishment of an independent, industry-wide certification standard for vendors of electronic trading systems. Any vendor seeking certification would need to meet various criteria broadly consistent with the requirements set out in the Consultation Paper. An intermediary seeking to use a third-party system could therefore meet its due diligence obligation by using a vendor that has been pre-certified. This could help ensure consistency in standards as well as improving efficiency in selecting third party providers.

4.14 Q17. What is your view on requiring an intermediary to make arrangements with a service provider for the purpose of meeting the proposed requirements on record keeping?

The Group foresees that it will be difficult, if not impossible, for an intermediary to require a third party service provider to comply with the proposed record keeping requirements, particularly service providers that are located outside of Hong Kong. Many electronic

trading systems are marketed globally on an "off the shelf" basis, and an intermediary seeking to purchase such a system would have very little leverage to impose terms requiring the service to comply with a Hong Kong-specific record-keeping requirement. As noted above, information about the development of electronic trading systems is highly sensitive, and it is unlikely that system developers will accede to this requirement. Accordingly, third party developers of electronic trading systems may simply choose not to sell their systems to Hong Kong rather than comply with this requirement, thereby reducing the choice of systems available to Hong Kong intermediaries. This could pose a significant problem to international firms in Hong Kong that seek to use a consistent technology platform globally, potentially resulting in greater risk and resources needed to support an ad hoc, Hong Kong-specific trading platform. The Group therefore opposes this requirement.

Should you have any questions or wish to discuss this response further, please feel free to contact Stephen Fletcher (stephen fletcher@linklaters.com, 2901 5028), Umesh Kumar (umesh.kumar@linklaters.com, 2842 4894) or Kevin Marr (kevin.marr@linklaters.com, 2901 5286).

Linklaters

ANNEX

Group members

- 1. ABN Amro Clearing Hong Kong Ltd
- 2. Asia Securities Industry & Financial Markets Association
- 3. Barclays Capital Asia Limited
- 4. BNP Paribas
- 5. CCB International (Holdings) Limited
- 6. China International Capital Corporation Hong Kong Securities Limited
- 7. Citigroup Global Markets Asia Limited
- 8. CLSA Limited
- 9. Credit Suisse (Hong Kong) Limited
- 10. Deutsche Bank AG
- 11. FIA Asia
- 12. Goldman Sachs (Asia) L.L.C.
- 13. The Hongkong and Shanghai Banking Corporation Limited
- **14.** ICBC International
- 15. Instinet Pacific Limited
- 16. J.P. Morgan Securities (Asia Pacific) Limited
- 17. Jefferies Hong Kong Limited
- 18. Macquarie Bank Limited
- 19. Merrill Lynch Asia Pacific Limited
- 20. Morgan Stanley Hong Kong Securities Limited
- 21. Nomura International (Hong Kong) Limited
- 22. The Royal Bank of Scotland plc
- 23. Societe Generale
- 24. Standard Chartered Bank (Hong Kong) Limited
- 25. UBS AG