

SFC Consultation Paper on the Regulation of Electronic Trading

Reply from Eclipse Options (HK) Ltd

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About Us

Eclipse Options is an exchange participant, market maker and proprietary trading firm headquartered in Hong Kong. We employ approximately 50 staff in Hong Kong, and are one of the largest Index Options and Equity Options Market Makers in Hong Kong. We also trade other offshore markets from our Hong Kong office.

We actively use technology in our business, and believe that technology has brought numerous benefits to exchange participants, including more liquidity, lower costs and tighter spreads for retail and institutional traders.

Overall Feedback

We welcome the opportunity to participate in the consultation. Overall, we believe it is an appropriate time to review the regulations, and some of the proposals are reasonable. However we have some concerns and areas for clarification:

1. **Use of the word 'intermediaries'**

The paper primarily discusses 'intermediaries' in the sense of a broker/client relationship. It's not clear how these proposed regulations would apply to other types of regulated individuals/firms such as proprietary traders (i.e. trade for themselves via their own exchange membership, and do not take client orders, or route orders electronically via brokers), and asset managers. In addition, the paper and draft legislation lacks clarity around when it is discussing intermediary in the sense of a person and when it is discussing intermediary in the sense of a firm.

2. **Absence of market structure/exchange rule changes**

The paper does not discuss any proposals for changes to market structure or exchange rules to address recent incidents that have arisen due to electronic trading in other markets (the flash crash, Knight securities etc.). This area is critical if we are to avoid similar problems in Hong Kong. We feel that without concrete proposals for HKEx to take its responsibility in ensuring the stability of the markets, the requirements in this proposal will not prevent a similar issue from occurring. The proposal as it stands would also mistakenly put the burden onto exchange members (rather than the exchange and regulators) to ensure the stability and regulation of the markets.

3. **Proposal that licensed individuals are responsible for IT design & development**

Licensed individuals and Responsible Officers are business people (brokers and traders), not IT development staff, and should not be expected to supervise IT design and development. We also believe that in general it is inappropriate for the SFC to regulate technology design and development. Instead the regulation should be at the firm level, and focus on the responsibility for the regulated firm to ensure that the operation of its IT infrastructure is handled by appropriately skilled staff, that the systems have been adequately tested and that they are fit for purpose.

4. **Clarification of scope for offshore trading**

We would like SFC to clarify that these proposals only apply to regulated entities/people for the trading of onshore markets (ie. Hong Kong Exchange).

Proposed Consultation on Exchange Rule Changes

While we welcome the SFCs initiative to update regulations in the light of the evolution of electronic trading, we do not believe that any of the proposed regulations will actually prevent a major market incident.

Instead we believe that Hong Kong Exchange needs to immediately implement a number of safety features and rule changes in order to protect the market from similar issues seen in other countries. We suggest that the Exchange and the SFC open this topic for discussion as soon as possible.

Some necessary changes for market integrity are:

- Introduction of circuit breakers/price limits
- Removal of at-market orders
- Restructuring of the auction process
- A revised and clarified trade cancellation policy to limit the potential impact of incidents similar to the Flash Crash, or Knight Securities issues
- Introduction of market-maker protection (automated order cancellation)

Replies to Specific Questions

Q1. Scope of regulation

- I) The types of trading covered are adequate.
- II) Agree exchange-traded contracts are appropriate for regulation.
- III) From a regulatory point of view, the proposals would obviously have to be limited to regulated persons/firms. However the whole paper talks about 'intermediaries' in the sense of regulated brokers who provide exchange access to third party clients. We'd like to see more clarity in general about how these regulations would be applied to firms like us that are regulated entities, but not intermediaries (i.e. we are exchange participants but solely trade on their own behalf and do not take client orders). We do however agree that regulation of intermediaries is the most important, because they are responsible for providing access to external clients (e.g. DMA, Algos, Internet trading) where often:
 - a. the clients themselves do not fall under direct regulatory supervision and
 - b. have not developed, and hence are less familiar with the technology

Q2. Responsibility for orders

This is a complex question, and requires much more clarification as to what is meant by 'responsibility'. For example, the paper already raises the issue of market misconduct, and the current wording suggests that it is the SFCs intention to hold an intermediary liable for certain types of market misconduct by their clients, but does not give much clarification. Another issue to be aware of is whether this responsibility could set a legal precedent that could prevent the intermediary from taking legal action against the client to recover trading losses due to a client's error.

Q3. Licensed individuals to supervise IT

It's unreasonable to expect licensed individuals (who are typically do not have extensive IT design and development experience) to 'supervise the design and development' of the system. In fact, if the trading system has been purchased from a third party vendor the firm has no way to supervise this process anyway.

Instead we believe it is more appropriate that the licensed firm (rather than individuals) be responsible solely for the deployment and operation of the system, and to ensure the system is maintained by suitably qualified staff, is appropriate for their needs, and is fit for purpose.

The RO/EO is also not the best placed to directly supervise the electronic trading system (again, they are responsible for business activities, not IT infrastructure). Again, as long as the firm itself is regulated, the responsibility for systems management should already be covered by suitably qualified IT staff at the firm level.

Q4. System security and reliability

Our main concern here is that intermediaries are broadly responsible for ensuring that orders cannot be sent that 'may be erroneous'. However in practice this is a very difficult thing for intermediaries to ensure, given that the exact same order may or may not be erroneous depending on the trading strategy of the client at that particular moment in time. For example, a large order to buy a stock may be erroneous due to a clients 'fat finger' error. Or it may be a legitimate order, because they've just sold a large amount of correlated stock and want to hedge. It's virtually impossible for an intermediary to know what the ultimate trading decision was behind every single order. In this regard, some clarification is needed.

Our suggestion would be some broad guidelines on the types of safety limits that the intermediaries should be required to apply, for example maximum order size/market value/transactions per second.

On system reliability, we propose that the requirement to report to SFC 'any material service interruption' only to apply to systems that are offered to clients (as per the following sections on System Capacity/Contingency).

Q5. Record keeping

As per Q3, it is not appropriate for licensed individuals to be expected to keep records on the design and development of IT systems. It is also not possible for intermediaries to keep records on the 'design and development' of the system, especially if it has been purchased from a third party vendor. The main practical issues with this are:

1. IT design and development is not typically carried out by licensed individuals
2. This information is not available if the system has been purchased from a third party
3. Even if the system is developed internally, it is often developed by separate subsidiaries, or offshore entities that would not be bound by HK regulations
4. Due to concerns about intellectual property, details of low-level IT design techniques are usually highly restricted within an organization and are not available to all licensed individuals

In addition, we believe that for practical purposes, the whole record keeping requirement should be waived for all existing systems that are already in use, as records should only be required to be kept on an ongoing basis, not recreated retroactively.

Some clarification and consideration is also needed on the types of records to be kept. e.g. what is meant by 'system delays'? e.g. would a 1 millisecond delay count as a 'system delay' or a 1 second delay or a 10 second delay etc.? Would all participants be required to automatically measure all delays in every part of their system in order to meet this requirement (which could be expensive and unnecessary in many cases)?

Q6. Period for record keeping

Modern electronic trading systems (algos in particular) do a huge amount of processing (market data, analysis, order management, etc.) and can generate Terabytes of log data every day. Keeping all this information available for 2 years could result in huge data storage costs for participants, and generally are not beneficial for risk & compliance unless they directly relate to an incident (which should normally be identified the same day).

As an alternative we'd suggest the following:

- Comprehensive system logs should be kept for 7 days, so that activities are traceable for risk and compliance.
- These comprehensive logs should be stored for 2 years where they directly relate to an incident that has been identified by risk or compliance within those 7 days.
- Within those 7 days, the SFC may also request the intermediary to store a particular set of data for 2 years.
- That a smaller subset of data (for example risk limit settings) should be kept for the full 2 years.
- In addition, storage of certain information such as order/trade details is also already covered by existing regulations.

We also question what information/logs the SFC would want to request from intermediaries, and under what circumstances they would want to request it. This is a concern for a number of reasons:

1. Detailed system logs (particularly those that may detail how the firms algos work) are proprietary information and highly confidential.
2. System logs are not in a format that regulators would be able to read and understand (they are typically targeted at IT operations and development).

Due to the highly confidential nature of the information being requested by the SFC in this proposal, were the SFC to go ahead with this requirement we would want assurances that:

1. The SFC will restrict the internal availability of this data on a need to know basis
2. The SFC will put in place stringent security procedures and Chinese walls to ensure that the information is not made available internally to any other staff
3. That staff who review this confidential information are barred from working for market participants or other competitors for a period of at least 2 years after receiving the material.

Due to the issues above, we'd suggest an alternative proposal that where SFC believes an incident has occurred, they can ask the intermediary to produce a summary of the incident in an appropriate form for the regulator to understand, and limited to:

1. A summary of orders/trades generated (in fact this could be obtained from the exchange)
2. What risk controls were in place
3. If and how these risk measures were shown to be inadequate

Q7. Pre-trade controls

Most of the pre-trade controls mentioned are reasonable. However our comments about the difficulty in identifying erroneous orders in Q4 apply here too. We'd suggest instead that the regulations focus on trading and credit limits.

Q8. Post-trade market surveillance

We do not believe it is the responsibility of the intermediaries to 'identify any order instructions and transactions which may be manipulative or abusive'. That should be the role of the exchange and regulators, for a number of reasons:

1. Intermediaries cannot detect market manipulation at the exchange level or when multiple intermediaries are involved. For example, the intermediary would not be able to detect if a client buys stock through themselves, but sells through a different account at another broker with no change in beneficial ownership.
2. Intermediaries are not as skilled and experienced as the regulators and exchange when it comes to detecting market manipulation.
3. The exchange and regulators are already appropriately funded, and have appropriate technology in place to carry out this task.
4. Building or purchasing electronic system for the detection of market manipulation would be very expensive for the participants, and would result in a large level of overlap in systems while still leaving a large hole in monitoring (#1 above).

However, we do think it is reasonable to require the intermediaries to report any suspicious or potentially manipulative behavior that they come across on a best-effort basis.

Q9. Client requirements

This is reasonable, and probably should also include a requirement that the client has appropriate financial capital given the additional risks involved.

Q10. DMA Sub-delegation

This is reasonable.

Q11. Algo development qualifications

This is reasonable, although as per above comments we'd like some clarification of whether this applies to the provision of algos to clients, or use internally or both.

Q12. Testing

Testing in general is a reasonable requirement, however the third bullet point 'the algo.. would not interfere with the operation of a fair and orderly market' and that they 'operate as designed at all times' is in practice impossible to guarantee.

We saw this recently with the flash crash in the USA where algos, while independent tested and verified, reacted in an unforeseen way when interacting with each other in an extreme market event. In this kind of scenario, it really falls to the exchange and regulators to enforce market-wide protection (for example, trading halts if prices move too far too fast). As indicated earlier, we consider these types of exchange protection to be fundamental to a stable and orderly market, and believe SFC must include these types of proposals in any changes to regulation.

Q13. Algo controls

We have the same comments as per earlier questions (Q4, Q7, Q8)

Q14. Record keeping

We have the same comments as per Q5.

Q15. Record keeping

We have the same comments as per Q6.

Q16. Due diligence

We agree in principal that appropriate due diligence should be performed. However the wording of this seems to suggest that the licensed firm is responsible for ensuring that any third party meets **all** the requirements of a licensed firm (i.e. the entirety of Schedule 7 Paragraph 18). This is not appropriate (for example, the technology vendor cannot be responsible for orders placed through its system – this should be the responsibility of the licensed firm that operates the system).

Instead we suggest simply requiring the licensed firm to take responsibility for the system, regardless of whether the system was developed internally or purchased from a third party. As a result we feel that this section should be removed, and the licensed firm simply required to exercise due diligence and ensure than any system (whether build internally or purchased) is fit for purpose.

Q17. Third-party record keeping

From a practical point of view, we are not sure how the SFC can request proprietary information from a third party vendor (that is not regulated, and may not even be in Hong Kong).

In addition, our comments about logs, record keeping and content in Q6 would apply equally to third-party vendors.