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The Securities and Futures Commission
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Via: electronic_trading@sfc.hk

24 September 2012

Dear Sirs

CONSULTATION PAPER ON THE REGULATION OF ELECTRONIC TRADING

1. IMC Asia Pacific Limited (IMC) welcomes this opportunity to comment in response to the proposals of the Securities and Futures Commission (the Commission) in relation to the regulation of electronic trading. We hope that the Commission will find the comments provided useful in determining the most appropriate way forward in regulating the financial markets of Hong Kong. Below, IMC offers a general comment in response to the proposed approach of the Commission, followed by answers to the specific questions set out in the Consultation Paper.

EXECUTIVE SUMMARY

2. In summary, IMC:
   a) welcomes and agrees with the proposal to incorporate the expectations of the Commission in respect of electronic trading into the Code of Conduct;
   b) explains IMC's view on the particular importance of focussing on trading systems as the critical control point to prevent erroneous orders entering the market and why, therefore, in the case of algorithmic trading, it is the trading system rather than the trading algorithm, that requires the greater focus; and
   c) provides comment in relation to the obligation on licensed persons to make arrangements for the maintenance of records relating to a trading system provided by a third party provider.

IMC ASIA PACIFIC LIMITED

3. IMC Asia Pacific Limited, is a wholly-owned subsidiary of IMC Financial Markets, a Netherlands based global proprietary trading firm established in Amsterdam in 1989. Since its establishment, IMC has specialised in making a market for a range of financial products, including derivatives, equities and ETFs, on exchanges around the world. In addition to Amsterdam, IMC presently has subsidiaries or offices in Chicago, Hong Kong, Zug and Sydney. Collectively, IMC trades across markets in Europe, the United States and the Asia Pacific region, including Australia, Japan and Korea. As an Exchange Participant of the SEHK and HKFE, IMC is a registered market maker in single stock options and trades various Exchange Traded Funds (ETFs) and Futures Contracts.

4. The comments provided below reflect IMC's experience of over 20 years trading in these various markets and our observations of both regulatory and technological developments in these jurisdictions. We hope that the Commission will find our comments useful in developing the regulatory framework for electronic trading.

GENERAL COMMENT

5. IMC notes that a number of the proposed requirements relate to trading algorithms as well as trading systems. In IMC's view, the better area for regulatory focus is that of the trading systems rather than the trading algorithms. This follows from the important distinction between the function of an algorithm on the one hand and the execution software, or trading system, responsible for entering orders into a market platform on the other.
6. A trading algorithm in practical terms may be defined as a series of calculations which review inputs such as market data, analyse that data with reference to pre-determined rules and, through that analysis, identify anomalies in price relationships or other trading opportunities in a market. Those opportunities are communicated to the trading system.
7. It is the trading system which then determines whether a trading message should be generated in response to each identified opportunity. In determining this, the trading system will consider a number of parameters provided by the trader responsible for the particular strategy for which the algorithm has identified the opportunity. These parameters may include: risk limits; rules in relation to prevailing market conditions; and existing orders in the market placed by the trading system. Accordingly, it is the integrity of the algorithmic trading system and the controls within it in particular, that are crucial in preventing the entry of orders that may disrupt the efficiency and integrity of a market.
8. It is for this reason, in IMC's view, that the focus of regulation for automated trading should be those trading systems by which orders are sent to market and trades executed, rather than the upstream algorithm which identifies opportunity in the market. The risk in focussing on algorithms lies in the likelihood that finite resources and time are diverted to an area which plays a relatively modest role in determining the quality of the orders that are entered into a market.
9. This focus on trading systems rather than trading algorithms was evident in the approach recently taken by the Australian Securities and Investments Commission (ASIC). Specifically, in its Consultation Paper 168, ASIC indicated that it was considering more extensive regulation of algorithms as one of the measures in the interests of market integrity.[1] However, evidently as a result of further analysis of trading arrangements in practice, in its revised proposals set out in Consultation Paper 184, ASIC has focussed directly on pre-trade filters and management processes for changes made to automated trading systems, while covering trading algorithms through regulatory guidance.[2]

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1 ASIC, Consultation Paper 168, "Australian equity market structure: Further proposals", October 2011 (see page 35): http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/cp168-published-20-October-2011-2.pdf/$file/cp168-published-20-October-2011-2.pdf

2 ASIC, Consultation Paper 184, "Australian market structure: Draft market integrity rules and guidance on automated trading", August 2012 (see page 14): http://www.asic.gov.au/asic/pdflib.nsf/LookupByFileName/cp184-published-13-August-2012.pdf/$file/cp184-published-13-August-2012.pdf

RESPONSES TO SPECIFIC QUESTIONS

Question 1 – Scope of regulation

10. IMC agrees with the proposed scope of the regulation of electronic trading.

Question 2 – Intermediary's responsibility for orders sent to market

11. IMC strongly supports proposed paragraph 18.3 clarifying an Intermediary's responsibility for orders sent to market. In IMC's view, it is the intermediary who must control the flow of orders sent to market either by the Intermediary itself or by the Intermediary's client.

Question 3 – Management and supervision of electronic trading system development

12. IMC agrees with the proposal as it relates to an electronic trading system developed by an Intermediary or a related company of the Intermediary.

Question 4 – Ensuring the integrity of the electronic trading system

13. IMC supports the proposed requirements relating to the integrity of an Intermediary's trading system.

Question 5 – Records regarding design, development, deployment and operation of electronic trading systems

14. IMC broadly supports the proposals in relation to record keeping. IMC would, however, suggest that the requirement in relation to design and development records held by a third party provided may prove difficult in practice due to the commercial sensitivity of such records. It would seem that the only practical way to seek assurance from the third party provider would be to seek agreement to a contractual provision requiring the provider's compliance with the substance of the proposed provisions in the Code of Conduct. However, given the proprietary nature of the information to be stored, it may not be possible for a licensed person to obtain access to this information for the purposes of ensuring compliance with these requirements.
15. Given this, in IMC's view the obligation upon a licensed person should be amended to require the best efforts of the licensed person to procure the cooperation of the provider in meeting the record keeping requirements set out in sub-paragraph 1.3.1(a) in respect of system design and development. Alternatively, the record keeping obligation of a licensed person in respect of third party software should be limited to those matters contained in sub-paragraphs 1.3.1(b), (c) and (d).

Question 6 – Proposed periods of record keeping

16. In IMC's view, the proposed periods for record keeping are reasonable.

Question 7 – Pre-trade controls

17. IMC strongly supports the proposed requirement for an Intermediary to maintain pre-trade controls. Non-Intermediary automated traders operating via the connectivity of an Intermediary are legally bound only by the provisions of the *Securities and Futures Ordinance* and relevant contractual provisions, if any, of the relevant Direct Market Access agreement under which they trade. However, those trading organisations are equally capable of entering orders or a series of orders that may be disruptive to the efficient and orderly function of the market. Given this, the

proposed requirement for an Intermediary to maintain pre-trade controls is an appropriate and indeed necessary measure to safeguard the efficiency and integrity of the markets of HKEx.

Question 8 – Post-trade monitoring

18. IMC supports this proposal. Certainly, it can be reasonably expected that many Intermediaries will respond to their responsibility for all orders placed through their trading systems by undertaking some form of post-trade monitoring. However, in IMC's view, it is preferable that this requirement is expressly included in the amended Code of Conduct as proposed.

Question 9 – Minimum client requirements

19. For the reasons set out in response to question 7, IMC agrees with the proposal for minimum DMA requirements.

Question 10 – Sub-delegation of DMA services

20. IMC agrees with the proposed restriction on the sub-delegation of DMA services.

Question 11 – Qualification of persons designing and developing trading algorithms

21. IMC broadly agrees with this proposal. While IMC considers that the focus of the Commission's approach should be trading systems which are responsible for order execution and incorporate pre-trade controls, a requirement that algorithms are developed by suitably qualified persons is reasonable.

Question 12 – Testing of trading algorithms

22. IMC broadly agrees with this proposal.

Question 13 – Effective controls to ensure the integrity of the market

23. IMC agrees with these proposals.

Question 14 – Records on design of algorithmic trading system and trading algorithms

24. IMC agrees with the proposals regarding algorithmic trading systems. As noted above in the general comments, it is the trading systems, that is the trade execution software which includes the pre-trade risk controls, that will determine which opportunities identified by a trading algorithm will result in orders being sent to a market. Accordingly, the integrity of the algorithmic trading system and the controls within it in particular, are crucial in preventing the entry of orders that may disrupt the efficiency and integrity of a market. Given this, requirements relating to system change management are entirely appropriate.
25. However, in IMC's view, the proposal in relation to trading algorithms, and in particular the reference to "any" modifications of an algorithm, may not be entirely practical. An Intermediary may make a number of quite immaterial changes (for example, "bug fixes") to an algorithm that pose an insignificant marginal risk to the type of orders that the Intermediary will send to the market as a result of that algorithm. This results from both the minor nature of such changes and also the fact that, even if the change results in unexpected behaviour in the algorithm, suitably robust pre-trade controls in the algorithmic trading system will prevent that unexpected behaviour from being translated into order that would threaten the integrity of a market.
26. Accordingly, IMC would suggest that the inclusion of trading algorithms in the scope of paragraph 18.6 of the Code of Conduct and paragraph 3.4 of Schedule 7 may not be necessary.

In the alternative, if this reference is retained, it may be more practical to qualify this obligation by requiring an Intermediary to retain the relevant records only in the case of "material" or "significant" modifications to the trading algorithm.

27. Thank you for the opportunity to respond to the Commission's Consultation Paper. Please do not hesitate to contact IMC if we may discuss any of the matters raised above.

Yours faithfully

Wu Cheuk Kuen
Responsible Officer

IMC Asia Pacific Limited