MATTERS RAISED BY THE PANEL ON FINANCIAL AFFAIRS IN RELATION TO THE CLOSING AUCTION SESSION

EXECUTIVE SUMMARY

- 1. This paper summarizes the responses of Hong Kong Exchanges and Clearing Limited ("HKEx") to the three matters raised by the Panel on Financial Affairs as follows:
 - A. Background leading to the implementation of the Closing Auction Session on 26 May 2008 The Closing Auction Session was introduced following broad market and public consultation, and designed based on the market consensus and the longstanding Pre-opening Session.
 - B. **Information on trading activities on 30 May 2008** Due to the MSCI rebalancing, there were related price fluctuations in the affected stocks before and during the trading day on 30 May 2008 and during the Closing Auction Session.
 - C. Actions, if any, taken / to be taken by HKEx / the Securities and Futures Commission (the "SFC") to investigate any market misconduct and plans to improve the operation of the Closing Auction Session, if any HKEx will review the Closing Auction Session by seeking feedback from all segments of the market and consider suggestions to further enhance the closing auction mechanism. HKEx and the SFC continue to review the trading activities on 30 May 2008.

Responses

Part A: Background leading to the implementation of the Closing Auction Session

- 2. On 21 March 2007, HKEx published a Consultation Paper on "The Introduction of a Closing Auction Session" to invite market views and comments on introducing a single-price auction after the completion of the Continuous Trading Session (see Appendix 1 for the Consultation Paper).
- 3. On 19 July 2007, HKEx published Consultation Conclusions on the HKEx website (see Appendix 2 for Consultation Conclusions).
- 4. Twenty-three sets of formal comments were received in addition to feedback from discussion with market participants. The respondents comprised the brokerage community, investment management and advisory firms, and representatives from the banking and legal sectors.
- 5. The majority of the respondents (21 out of 23) including 4 major retail-based exchange participants and the Hong Kong Stockbrokers Association supported the introduction of a Closing Auction Session. One major institutional-based exchange participant was not in favour of the proposal while another one did not indicate a preference.
- 6. The consultation responses generally supported the Closing Auction Session as an

internationally proven practice providing a transparent and fair method for determining closing prices of securities and facilitating the execution of trades at the closing prices. The equilibrium prices and volumes throughout the Closing Auction Session are continuously updated and disseminated to the market to ensure transparency.

- 7. The SFC approved the amendments to the Rules of the Exchange in relation to the introduction of a Closing Auction Session on 22 October 2007. HKEx announced on 31 October 2007 that it would introduce the Closing Auction Session on 26 May 2008, subject to market readiness. The rollout date was further confirmed on 19 May 2008 after the successful completion of extensive system tests, end-to-end testing, and a series of mandatory market rehearsals that included all exchange participants using Broker Supplied Systems.
- 8. To help exchange participants prepare for the implementation of the Closing Auction Session and understand its operation, HKEx staff introduced the model during their routine visits to exchange participants' offices. From April 2008, a series of seminars were conducted with more than 500 attendees from 200 plus exchange participants.
- 9. In addition, HKEx issued circulars, press releases and newspaper articles, and organized media interviews to notify the market of the implementation as well as the features of the Closing Auction Session.
- 10. A special section on the Closing Auction Session was created on the HKEx website¹ so that exchange participants, market users and the public could review the news releases, circulars, technical documents and other information on the Closing Auction Session.

Part B: Information on trading activities on 30 May 2008

Background: MSCI Rebalancing

11. On 6 May 2008, MSCI Barra announced its index rebalancing effective as at the close of 30 May 2008. This time, in addition to the regular review of additions, deletions, and reweightings of index constituents, MSCI introduced significant changes to its indexing methodology and it affected altogether 167 listed stocks in Hong Kong.

- 12. According to industry estimates, over \$500 billion of assets including active and passive funds are benchmarked to MSCI indices tracking Hong Kong listed stocks. The assets tracking Hong Kong-related MSCI indices have increased substantially due to the growth of the Hong Kong and Mainland China securities markets especially in the past year.
- 13. It was conservatively estimated that the MSCI rebalancing would result in at least \$30 billion of fund flows from passive funds (not including potential fund flows from active funds and hedge funds) tracking the relevant MSCI indices to the 167 stocks affected by the rebalancing.
- 14. In light of the significance of the index rebalancing, HKEx reminded exchange

¹ The hyperlink to the Closing Auction Session corner is http://www.hkex.com.hk/infra/cas/cas.htm.

participants in a circular issued on 19 May 2008 to pay particular attention to the closing auction features expecting that investors would wish to trade at the closing price (eg end of months/quarters, effective dates of index rebalancing) consistent with overseas markets with closing auctions.

15. In addition, the MSCI rebalancing event on 30 May 2008 was mentioned by HKEx colleagues to around 200 attendees at a presentation organized by the Hong Kong Stockbrokers Association on 22 May 2008, and was also covered in the slides that were distributed to the attendees.

Trading on 30 May 2008

- 16. On 30 May 2008, HKEx recorded about \$14 billion turnover during the Closing Auction Session out of \$86 billion for the entire day. The transaction value of the 167 stocks affected by MSCI rebalancing accounted for about 97 per cent of the total turnover in the Closing Auction Session (see Appendix 3 for details).
- 17. Of the 167 stocks affected by the MSCI rebalancing exercise, 21 stocks recorded more than 5 per cent fluctuation between the closing prices and the last traded prices at 16:00 (see Appendix 4 for details). The rest of the 146 stocks affected by the MSCI rebalancing exercise did not experience any major volatility during the Closing Auction Session. The volatility in those 21 stocks has since attracted much attention although it is in fact similar to the daily volatility in the top 20 gainers and losers among HKEx listed stocks.
- 18. A few additional observations were noted in relation to the trading activities on 30 May 2008.
 - (a) Most of the abovementioned 21 stocks experienced price volatility throughout the Continuous Trading Session on 30 May 2008 before the commencement of the Closing Auction Session.
 - (b) Some of these 21 stocks had also recorded price fluctuations (up to 59 per cent) and increased transaction volumes (up to 400 per cent) between the announcement of the MSCI rebalancing event on 6 May 2008 and 29 May 2008.
 - (c) Similar to the previous four trading days, there were few order cancellations during the Closing Auction Session on 30 May 2008. The fluctuations in prices were primarily due to the interaction of significant buying and selling orders.
 - (d) All segments of the broker and investor communities participated in the Closing Auction Session. It was recorded that 372 out of a total of 448 exchange participants participated in the Closing Auction Session on 30 May 2008, most of them being retail-based exchange participants with a majority of them actively inputting new orders in the Closing Auction Session.
 - (e) Price fluctuations also occurred in other regional markets² on 30 May 2008 due to the MSCI rebalancing event. For example, 106 stocks impacted by the MSCI

² Including Australia, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand.

rebalancing in the region had recorded over 5 per cent price fluctuations from the previous day close, whereas 463 stocks recorded a price deviation of more than 5 per cent since the announcement of MSCI rebalancing on 6 May 2008.

<u>Impact on Retail Investors</u>

- 19. Contrary to some reports, retail-based exchange participants in fact participated significantly during the Closing Auction Session on 30 May 2008. For instance, they contributed:
 - (a) approximately 10 per cent of the turnover,
 - (b) approximately 45 per cent of the total number of orders, and
 - (c) approximately 30 per cent of the total number of trades.
- 20. Retail-based exchange participants and investors in particular appear to have used the rebalancing and the Closing Auction Session to enjoy the opportunity to buy low where institutions were selling heavily and sell high to the less-price-sensitive institutional buyers. For instance, among those 21 stocks, they contributed:
 - (a) approximately 22 per cent of the selling turnover for those advancing stocks (whereas close to 100 per cent of the buying turnover of such stocks was contributed by institutional brokers), and
 - (b) approximately 41 per cent of the buying turnover for those declining stocks (whereas close to 100 per cent of the selling turnover of such stocks was contributed by institutional brokers).

<u>Part C: Actions, if any, taken / to be taken by HKEx to investigate any market misconduct and plans to improve the operation of the Closing Auction Session, if any </u>

- 21. Both HKEx and the SFC have market surveillance programmes to monitor trading activity and price movements of stocks. Where appropriate, HKEx will inform the SFC of unusual market conditions and cases of suspected manipulation for SFC's investigation and potential criminal prosecution.
- 22. HKEx has conducted a comprehensive review and analysis on all relevant order and trade activities by each participating exchange participant during the Closing Auction Session on 30 May 2008. The analysis concerning the event has already been referred to the SFC. The SFC will review this analysis, combine that with its own analysis, and then take appropriate regulatory action if the evidence so warrants.
- 23. HKEx will take the following actions with priority:
 - (a) HKEx will review the Closing Auction Session seeking feedback from all segments of the market and consider suggestions to further enhance the closing auction mechanism.

- (b) HKEx has already submitted proposed rule amendments to the SFC in relation to allowing short selling at the Pre-opening and Closing Auction Sessions since August 2007. The matter is currently under consideration by the SFC. If approved by the SFC, HKEx would work with exchange participants to implement this enhancement as soon as possible.
- (c) Continuous market education will be conducted by HKEx in conjunction with the SFC to ensure exchange participants and the investing public are familiar with the mechanism and the impact of the Closing Auction Session.
- (d) A circular was issued to exchange participants on 4 June 2008 to remind them of the Hang Seng Index rebalancing exercise effective on 10 June 2008.
- (e) HKEx has contacted MSCI Barra and has suggested that the company could provide more transparency to the investing public on the index rebalancing events in the future. HKEx would contact other index compilers and raise similar suggestions.

ATTACHMENTS

- Appendix 1: Consultation Paper on the Introduction of a Closing Auction Session
- Appendix 2: Consultation Conclusions on the Introduction of a Closing Auction Session
- Appendix 3: Turnover Statistics of Closing Auction Session in relation to Market Total (26-30 May 2008)
- Appendix 4: Price Volatility of the 21 MSCI Stocks with Price Deviation of More than 5 Per Cent after the Closing Auction Session on 30 May 2008

CONSULTATION PAPER THE INTRODUCTION OF A CLOSING AUCTION SESSION

March 2007



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EXECUTIVE SUMMARY

This public consultation seeks views and comments from market practitioners, listed companies, investors, members of the public and Exchange Participants on the proposal to introduce an end-of-day closing trading session for all securities which allows the input of orders into the Stock Exchange's Automatic Order Matching and Execution System (AMS) for a single price auction (closing auction session) after the completion of the continuous trading session.

The introduction of a closing auction session aims to improve the determination of securities closing prices, facilitate trading at market close, and enhance market liquidity and the overall competitiveness of the Hong Kong securities market.

To provide a closing auction session that is easy for market participants to understand and use, Hong Kong Exchanges and Clearing Limited (HKEx) proposes adopting the trading mechanism that is used already for the pre-opening session. The pre-opening session has operated smoothly and has been well received by market participants since its introduction in 2002.

The proposed features of the closing auction session are summarised in Part C of this paper.

PART A: INTRODUCTION

Current Closing Price Calculation Mechanism

- 1. Currently, the closing price of a stock is determined by taking the median of 5 nominal prices¹ in the last minute of the continuous trading session. The system will take up to 5 snapshots of the nominal prices at 15-second intervals starting from 3:59:00 p.m. The five snapshot nominal prices are then arranged in ascending order and the median (i.e. the middle one) will then be taken as the closing price.
- 2. The following example illustrates the calculation:

Snapshot	<u>Time</u>	Bid Price	Ask Price	<u>Last</u> <u>Recorded</u> <u>Price</u>	Nominal Price
1st	3:59:00 p.m.	\$39.40	\$39.50	\$39.50	\$39.50
2nd	3:59:15 p.m.	\$39.40	\$39.50	\$39.50	\$39.50
3rd	3:59:30 p.m.	\$39.30	\$39.40	\$39.50	\$39.40
4th	3:59:45 p.m.	\$39.30	\$39.40	\$39.40	\$39.40
5th	4:00:00 p.m.	\$39.20	\$39.30	\$39.30	\$39.30

- 3. The five snapshot nominal prices are arranged in ascending order (i.e. \$39.30, \$39.40, \$39.50, \$39.50) and then the median (i.e. \$39.40) will be taken as the closing price. Choosing the median of five snapshot nominal prices ensures that the closing price will not be biased by one single trade concluded at a specific time.
- 4. The current closing price calculation method has been in use since 1987 starting initially with 3 snapshots of nominal prices. It was subsequently extended to 5 snapshots of nominal prices at the launch of AMS in 1993. At present, the system takes a few minutes to complete the closing price calculation for the whole market.

¹ The nominal price in the continuous trading session is determined by comparing the current bid price, current ask price and last traded price / previous closing price, as the case may be. For details, please refer to Chapter 1 of the Rules of the Stock Exchange of Hong Kong.

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Views on the Current Closing Price Calculation Mechanism

- 5. Some market participants consider that the current closing price calculation method is simple and it provides the randomness that the closing prices will not be unreasonably biased by one single trade (i.e. the last trade). However, other comments on the current method have been obtained and are presented below:
 - (a) the last minutes of trading are often characterised by increased price volatility;
 - (b) it is difficult to achieve the closing price in order to facilitate the execution of portfolio valuation and index rebalancing activities. The result is that the Hong Kong market is one of the hardest closes to match and more difficult to trade than markets with closing auctions;
 - (c) the spread (the difference between the best bid and the best ask) often widens near the market close;
 - (d) it is difficult to understand by the general public in case the closing price is different from the last traded price; and
 - (e) most of the major overseas markets adopt end of day closing auctions to determine fair closing prices.
- 6. Some market participants were of the view that a closing auction would improve the existing method used for determining closing prices.

Practices in Major Overseas Markets

- 7. The popularity of a closing auction mechanism has increased in recent years and has become the international practice adopted by most equity markets.
- 8. Numerous major overseas markets have call auctions at both market open and close. In fact, it appears that only a few stock exchanges including HKEx have adopted a pre-opening auction solely without introducing a closing auction.
- 9. A comparison of major overseas markets that have both pre-opening and closing sessions is presented along with a description of the applicable closing auction mechanisms and duration in Appendix I.
- 10. At these major overseas markets, the closing auctions operate in a manner similar to the opening auctions. The main difference is the duration of the closing sessions which are normally shorter and conclude in around 5 minutes.
- 11. In Asia, most of the major markets have adopted closing auctions to determine the closing price Australia, Korea, Japan, Singapore, Taiwan and Thailand. Through discussions with some Exchange Participants, they indicated that the closing auction was usually the most active trading period of the day for most Asian markets. The exchanges' experience in using an auction to close their equity markets and determine closing prices has been positive.

Experience with the Pre-opening Session in Hong Kong

- 12. In March 2002, HKEx introduced its pre-opening session for the stock market for all securities. One key objective of introducing the pre-opening session was to determine a competitive opening price before the commencement of the continuous trading session.
- 13. Currently, the pre-opening session comprises an order input period from 9:30am to 9:45am; a pre-order matching period from 9:45am to 9:50am; an order matching period from 9:50am to 9:58am; and a blocking period from 9:58am to 10:00am during which no orders may be input nor resident orders matched. Since its introduction, the pre-opening session has operated smoothly and positive comments have been received from a broad cross section of market participants.
- 14. Based on statistics for the second half of 2006, over 1,700 listed securities have had transactions concluded during the pre-opening session. On average, these transactions contribute approximately 1.2% of total daily market turnover (i.e. \$420M). With respect to Hang Seng Index (HSI) constituent stocks, the percentage of daily turnover concluded by single price auction during the pre-opening session is about 1.6%. The pre-opening session also collects many limit orders that carry through to the 10:00 opening of the continuous trading session.

PART B: MARKET OPINIONS

15. Through discussions with market participants and reviews of academic studies, some widely held views and comments on the closing auction have been collected and are presented in this section.

Reduce Trading Volatility

- 16. Some Exchange Participants indicated that their clients have indicated a strong preference for a closing auction mechanism in Hong Kong to smooth out volatility. For example, some asset managers adopt a 'passive' approach to investment, i.e. their goal is simply to match the performance of a benchmark index. As the index performance is based on the closing prices of the underlying securities, it is in the clients' best interests for the asset managers to trade for their customers' accounts at the closing price. The asset managers therefore instruct their brokers to try to match this closing price used to calculate the relevant indexes.
- 17. However, on any given day, trading at the close of the market under the current closing mechanism is often significantly more volatile than trading during the rest of that day as brokers attempt to obtain the closing price of the relevant stock on behalf of their asset management clients based on the median of 5 nominal prices for that stock in the last minute. This volatility makes it more difficult for brokers (and therefore their clients) to consistently obtain the closing price.

Enhance Market Liquidity

- 18. Some Exchange Participants were of the view that the consolidation of the order flow in a closing auction could overcome the problem of possible gaps and order imbalances that can arise in the continuous trading environment, particularly with respect to illiquid securities. Some felt that a closing auction could help complete an order that had not otherwise been filled during the continuous trading session. The closing auction will also offer an additional trading method for inactive securities which might contribute to enhanced liquidity.
- 19. The settlement price determined using a closing auction mechanism could also serve to enhance the liquidity of derivative instruments. In this regard some Exchange Participants cited the case of index arbitrage where the difference between the settlement price and actual unwinding prices can be so wide that the entire profit may be lost. They estimate that trading volumes would likely increase if the calculation of a final settlement price was determined by an auction system. For further details on the calculation of the final settlement price/official settlement price for HKEx's derivative instruments, please refer to Part D below. No proposal is being put forward at this time to change the final settlement price procedures for HKEx derivatives contracts.

The Potential for Manipulation of Stock Prices

20. As indicated by some of the institutional participants interviewed, the closing auction is less susceptible to market manipulation considering the transparency of auction processes and based on their trading experience in major overseas markets with closing auction mechanisms.

- 21. Some Exchange Participants were of the view that the move to a auction closing mechanism could make the Hong Kong market more vulnerable to market manipulation at the close of trading than it presently is, in particular for illiquid stocks, and suggested that the closing auction should only be applied to the most liquid stocks, say HSI constituents, at the initial stage. The concern is that one or several orders can have a big effect on the closing price. However, an opposing view suggested that this problem is not unique to the closing auction. One or several orders can have the same effect using the current closing price calculation mechanism.
- 22. In any event, persons engaging in or attempting market manipulation would of course be subject to appropriate regulatory actions in the same way as they would under the current closing mechanism.

Market and Broker Concerns

- 23. Some Exchange Participants consider that the current closing price calculation method (i.e. the median of the five 15 second snapshots) has worked well since 1993. A new closing auction for determining closing prices may cause confusion to the market. We believe these concerns can be addressed. To provide a closing auction session that is easy for market participants to understand and use, the proposed closing auction is similar to the current pre-opening auction. In addition, HKEx will arrange seminars, practice sessions and market rehearsals for market participants before any launch of a closing auction mechanism.
- 24. Some Exchange Participants are concerned that the implementation of a closing auction would engender system changes and other new operational arrangements. As a result, they may have to incur additional investment. However, by adopting a similar auction mechanism as in the current pre-opening session to the closing auction, it is anticipated that the cost and change to Exchange Participants' systems and operations would not be significant.

Academic Studies

25. A review of academic studies indicates that the introduction of a closing auction reduces volatility at the market close. Further, it is said that a closing auction improves the quality of the price discovery process. The improved price discovery can also serve to increase the efficiency of the derivatives markets by making the marking-to-market of derivative products more orderly and by making it easier for traders to unwind their positions at appropriate prices.

PART C: PROPOSED CLOSING AUCTION SESSION FOR COMMENTS

Trading Mechanism of the Closing Auction Session

26. Similar to the current pre-opening session, the closing auction session will apply to all securities. It consists of an order input period, a pre-order matching period and an order matching period with the following proposed operating hours:

	Normal Day Trading	Half Day Trading (e.g. Christmas eve)
Order input period	16:00 to 16:05	12:30 to 12:35
Pre-order matching period	16:05 to 16:06	12:35 to 12:36
Order matching period	16:06 to 16:11	12:36 to 12:41

The operating hours may be revised after taking into account system performance and order patterns during the initial period.

Order Input Period

- 27. All outstanding orders will be automatically carried forward from the continuous trading session to the order input period of the closing auction session. This arrangement should serve to enhance the liquidity and order flow for the closing auction.
- 28. During the order input period, only at-auction orders (without specified price) and at-auction limit orders (with specified price) will be accepted. Order types available during the continuous trading session, such as limit orders, enhanced limit orders and special limit orders, will not be accepted.
- 29. Orders will be accumulated and updated in the trading system continuously. These orders will be non-binding and may be modified or cancelled at any time between 16:00 to 16:05 or 12:30 to 12:35 (as the case may be) during which no matching occurs. During this period, an Indicative Equilibrium Price (IEP) and Indicative Equilibrium Volume (IEV)² will be continuously re-calculated as new orders are received and displayed on the stock pages as in the current pre-opening session.

² In general, the IEP will be one of the prices which fall within the range of the highest bid price and the lowest ask price at which the aggregate of the value of executed trades is maximised. This calculation mechanism applies to both the order input period and the pre-order matching period. IEV is the number of shares that will be matched at the IEP.

Pre-order Matching Period

- 30. During the pre-order matching period between 16:05 to 16:06 or 12:35 to 12:36 (as the case may be), only at-auction orders will be accepted and no orders can be modified or cancelled. This arrangement provides a mechanism to attract more at-auction orders.
- 31. As in the order input period, the IEP/IEV will be continuously updated as new orders are received and displayed on the stock pages throughout the pre-order matching period.
- 32. Some Exchange Participants suggested that at-auction orders entered should also be allowed to be cancelled during the pre-order matching period since traders may wish to hold back the orders if the IEP moves significantly against them in this period.

Order Matching Period

- 33. During the order matching period from 16:06 to 16:11 or 12:36 to 12:41 (as the case may be), traders will not be allowed to input, modify or cancel any orders.
- 34. Orders gathered during the order input period and the pre-order matching period are matched by order type, price and time priority as is done in the pre-opening session. Note that an at-auction order has higher matching priority than other orders.
- 35. The final IEP of each security with matched orders will be determined based on the existing rules for the pre-opening session (Appendix II). The final IEP will be taken as the closing price.
- 36. In any case, if the closing auction session does not generate a closing price (i.e. no IEP), the existing method will apply using the median of the five 15 second snapshots taken in the last minute of continuous trading (i.e. the current closing price calculation method) as the closing price. In addition, all unmatched orders lapse after the closing auction session.

Other Trading Arrangements in the Closing Auction Session

- 37. At-auction orders and at-auction limit orders entered during the order input period and the pre-order matching period of the closing auction session will be subject to the same validation procedure as that in the pre-opening session.
- 38. There may be no closing auction session if the continuous trading session is terminated or adversely affected by an emergency, including but not limited to fire or other accident, typhoon, rainstorm, computer malfunction and other similar events. Under such circumstances, the current emergency arrangement for determining closing prices will follow (i.e. the last nominal prices will be used as closing prices).
- 39. Under the current arrangement for continuous trading, if an Exchange Participant is suspended from trading, orders entered by that Exchange Participant will be cancelled whilst trades executed before then will be binding. In the closing auction session, if an Exchange Participant is suspended from trading after the commencement of auction matching, all trades concluded by auction matching will be valid. This approach is also consistent with that in the pre-opening session.

Random Closing Alternative

- 40. As noted from the comparison of major overseas markets (Appendix I), some overseas markets have a random closing session. Under this approach, the main difference is that the auction matching starts randomly within a defined time period. The precise moment of concluding the order input period and/or pre-order matching period is not known beforehand. This can make it more difficult for market players to input or remove orders immediately before the commencement of the order matching period with the intention of affecting the IEP.
- 41. For example, assuming auction matching is scheduled to take place at 16:05 and the actual matching time is randomly generated and occurs up to 15 seconds on either side of the above time, the auction matching may start at any time between 16:04:45 and 16:05:15. The Australian Stock Exchange, London Stock Exchange and Deutsche Bourse adopt random starts of their auction matching sessions.
- 42. Some Exchange Participants consider that the current auction mechanism for the pre-opening session has been in use since 2002 and no particular problems have arisen. They comment that a new random closing mechanism would require additional investments in system changes and other operational arrangements. As a result, the system costs for this would be appreciably more than the proposal to use existing AMS functionality.

PART D: OTHER CONSIDERATIONS

Trading Hours

- 43. Currently, the cash market closes at 16:00. Assuming the trading hours for the continuous trading session remain unchanged, with the introduction of a closing session, the effective trading hours of the cash market will be extended for the duration of the closing auction (say, around 11 minutes).
- 44. As a result, the current window (i.e. 15 minutes) between the closing of the cash market (16:00) and the derivatives market (16:15) will be narrowed accordingly. Some market participants considered that this window is useful for unwinding the position of derivative products after the underlying closing prices are generated. To retain the status quo, it was suggested that if the closing auction is adopted the closing time for the derivatives market should be extended accordingly.

Closing Prices Dissemination

45. From January 2007, the securities closing prices are calculated automatically by the AMS/3 system after market close and disseminated to Exchange Participants and other market users around 16:03. Under the proposed closing auction session, the securities closing prices will be disseminated to the market after completion of the closing auction matching (i.e. around 16:11).

Final Settlement Price (FSP) for Derivative Products

- 46. Currently, the FSP for equity index products and stock futures traded on HKEx are determined by the average of the values of the index/stock price taken at five-minute intervals during the last trading day.
- 47. If a closing auction session is introduced, the closing price determined by the closing auction session could be considered in future as an option for calculating the FSP for derivative products. Some participants considered that single auction prices would better facilitate arbitrageurs wishing to unwind their arbitrage positions provided that the liquidity in the closing auction session was deep enough. Therefore, change to the current FSP calculation will only be considered after we ascertain the market effect resulting from the implementation of the closing auction.

PART E: NEXT STEPS AND TIME FRAME

- 48. HKEx invites market practitioners, listed companies, investors, members of the public and Exchange Participants to consider the introduction of a closing auction session together with the proposed features set out in this consultation paper and forward to HKEx their views, suggestions and comments.
- 49. Please submit your comments to the address below on or before 7 May 2007 to:

Hong Kong Exchanges and Clearing Limited 12th Floor, One International Finance Centre 1 Harbour View Street Central Hong Kong

Re: Consultation Paper on the Introduction of a Closing Auction Session

Comments may also be sent by fax to (852)2868-5223 or by e-mail to feedback@hkex.com.hk. This consultation paper is also available on HKEx website at http://www.hkex.com.hk.

- 50. The names of persons who submit comments on this consultation paper together with the whole or part of their submissions may be disclosed to members of the public. Statements of HKEx's policy on handling personal data are set out in Appendix IV.
- 51. Following consideration of market responses, HKEx will issue a consultation conclusion summarising the main points made by respondents.
- 52. It is anticipated that the earliest time for the introduction of a closing auction session will be in **the second half of 2007** after taking into account market comments and readiness and the need for operational or system changes to be made.

APPENDIX I: MAJOR OVERSEAS STOCK MARKETS WITH SINGLE PRICE AUCTION MECHANISM

Country	Opening Auction	Closing Auction	Duration of Closing Auction	Fixed Closing / Random Closing	Trading volume for Closing Auction ⁴ (% of total)
HKEx	Yes	No	N/A	N/A	N/A
Australian Stock Exchange	Yes	Yes	Order input – 16:00 to 16:10 Order matching – 16:10	Random (from 16:10 to 16:11)	7.7%
Shanghai Stock Exchange and Shenzhen Stock Exchange	Yes	No	N/A	N/A	N/A
Tokyo Stock Exchange ²	Yes	Yes	Order matching – 15:00	Fixed	2.9%
Korea Stock Exchange	Yes	Yes	Order input – 14:50 to 15:00 Order matching – 15:00	Fixed	7.8%
Singapore Stock Exchange	Yes	Yes	Order input – 17:00 to 17:05 Order matching – 17:05 to 17:06	Fixed	8.0%
Deutsche Bourse	Yes	Yes	Order input – 17:30 to 17:35 Order matching – 17:35	Random (from 17:35:00 to 17:35:30)	N/A
Euronext Paris	Yes	Yes	Order input – 17:25 to 17:30 Order matching – 17:30	Fixed	N/A
London Stock Exchange (SETS) ³	Yes	Yes	Order input – 16:30 to 16:35 Order matching – 16:35	Random (from 16:35:00 to 16:35:30)	N/A
New York Stock Exchange ²	Yes	Yes	Order input – 9:30 to 15:58 Freeze time – 15:58 to 16:00 Order matching – 16:00	Fixed	N/A

Sources of information: Websites of exchanges and CSFB research report (Asian Closing Price Mechanisms)

- 1. The above mechanism refers to the main board market of the exchanges.
- 2. For Tokyo Stock Exchange and New York Stock Exchange, orders for closing auction are placed and shown throughout the day and matched immediately with the remaining limit orders after completion of the continuous trading.
- 3. For London Stock Exchange, the auction period will be extended (by a maximum of 13.5 minutes) under 2 situations: (i) when the indicative auction match price breaches the price tolerance level (which are predefined percentage thresholds either side of the dynamic base price (in general equal to the last traded price)); or (ii) if market orders would remain unexecuted following the auction matching.
- 4. Median daily volume over the period from June to August 2005.

APPENDIX II: RULES FOR DETERMINING THE INDICATIVE EQUILIBRIUM PRICE

Rules of the Stock Exchange of Hong Kong

Rules for Determining IEP

- 501H.(1) An IEP will be calculated according to the following rules only if the highest bid price of the buy at-auction limit orders is equal to or higher than the lowest ask price of the sell at-auction limit orders:
 - (a) the IEP shall be one of the bid prices or ask prices which falls within the range of the highest bid price of the buy at-auction limit orders and the lowest ask price of the sell at-auction limit orders (inclusive of both prices) at which the aggregate size of the trades to be concluded based on the methodology specified in Rule 517(1)(a) is maximised;
 - (b) if more than one price satisfies Rule 501H(1)(a), the IEP shall be the price at which the normal order imbalance is the lowest. For the purposes hereof, normal order imbalance, in relation to a price, means the difference between the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price and the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price;
 - (c) if more than one price satisfies Rule 501H(1)(b), the IEP shall be-
 - (i) the highest of such prices if in relation to each and every of such prices, the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price is greater than the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price; or
 - (ii) the lowest of such prices if in relation to each and every of such prices, the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price is smaller than the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price;
 - (d) if more than one price satisfies Rule 501H(1)(b) and 501H(1)(c) does not apply, the IEP shall be the price which is the closest to the previous closing price. If two prices are of equidistant from the previous closing price, the IEP shall be the higher of the two prices. However, if the previous closing price is not available, the IEP shall be the highest of such prices.

APPENDIX III: LIST OF QUESTIONS

List of Questions

- 1. Do you have any other comments on the application of a closing auction session? Please explain your view.
- 2. Do you support the proposal to introduce a closing auction session? Why or why not? Please explain your view.
- 3. Are there any other suggestions on the proposed features / trading arrangements of the closing auction which we ought to consider? Please explain your view.
- 4. What would be the estimated lead time required for changes to systems and operations of your firm to cater for the proposed closing auction session?
- 5. Do you have any comments on the random closing approach? Please explain your view.
- 6. Are there any other issues regarding the introduction of a closing auction session not mentioned in this consultation paper that we ought to consider? Please explain your view.

APPENDIX IV: PERSONAL INFORMATION COLLECTION AND PRIVACY POLICY STATEMENT

PERSONAL INFORMATION COLLECTION AND PRIVACY POLICY STATEMENT

Provision of Personal Data

1. Your supply of Personal Data to HKEx is on a voluntary basis. "Personal Data" in these statements has the same meaning as "personal data" in the Personal Data (Privacy) Ordinance, Cap 486.

Personal Information Collection Statement

2. This Personal Information Collection Statement is made in accordance with the guidelines issued by the Privacy Commissioner for Personal Data. It sets out the purposes for which your Personal Data will be used after collection, what you are agreeing to in respect of HKEx's use, transfer and retention of your Personal Data, and your rights to request access to and correction of your Personal Data.

Purpose of Collection

- 3. HKEx may use your Personal Data provided in connection with this discussion paper for purposes relating to this exercise and for one or more of the following purposes:
 - for performing or discharging HKEx's functions and those of its subsidiaries under the relevant laws, rules and regulations;
 - for research and statistical purposes;
 - for any other lawful purposes.

Transfer of Personal Data

- 4. Your Personal Data may be disclosed or transferred by HKEx to its subsidiaries and/or regulator(s) for any of the above stated purposes.
- 5. Your Personal Data may also be disclosed or transferred to members of the public in Hong Kong and elsewhere as part of the public discussion of this paper, including but not limited to disclosing your name to the public together with the whole or part of your comments by posting them on the HKEx website, publishing them in documents or by other means. If you do not wish your name to be disclosed to members of the public, please state so when responding to this paper.

Access to or Correction of Data

6. You have the right to request access to and correction of your Personal Data in accordance with the provisions of the Personal Data (Privacy) Ordinance. HKEx has the right to charge a reasonable fee for processing any data access request. Any such request for access to and/or correction of your Personal Data should be addressed to the Personal Data Privacy Officer of HKEx in writing by either of the following means:

By mail to: Personal Data Privacy Officer

Hong Kong Exchanges and Clearing Limited 12th Floor, One International Finance Centre

1 Harbour View Street

Central Hong Kong

By email to: pdpo@hkex.com.hk

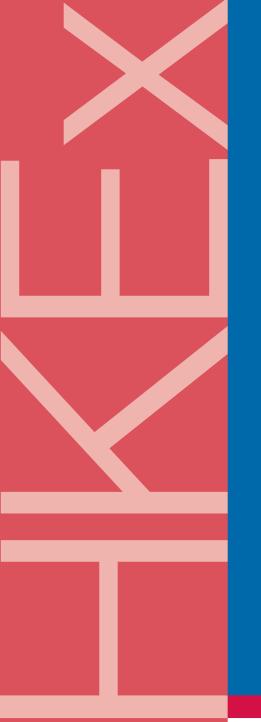
Retention of Personal Data

7. Your Personal Data will be retained for such period as may be necessary for the carrying out of the above-stated purposes.

Privacy Policy Statement

- 8. HKEx is firmly committed to preserving your privacy in relation to Personal Data supplied to HKEx on a voluntary basis. Personal Data may include names, addresses, e-mail addresses, login names, etc, which may be used for the stated purposes when your Personal Data is collected. The Personal Data will not be used for any other purposes without your consent unless such use is permitted or required by law.
- 9. HKEx has security measures in place to protect against the loss, misuse and alteration of Personal Data supplied to HKEx. HKEx will strive to maintain Personal Data as accurately as reasonably possible and Personal Data will be retained for such period as may be necessary for the stated purposes and for the proper discharge of the functions of HKEx and those of its subsidiaries.





CONSULTATION CONCLUSIONS THE INTRODUCTION OF A CLOSING AUCTION SESSION

July 2007



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EXECUTIVE SUMMARY

This report presents the results of a public consultation undertaken by Hong Kong Exchanges and Clearing Limited (HKEx) on the proposal to introduce a closing auction session for the cash market. During the consultation process, HKEx received a total of 23 sets of market comments and the majority of the respondents welcomed the proposal. In view of the broad support received, HKEx will implement the closing auction model substantially as originally proposed except that the durations for the order input period and the pre-order matching period have been extended from 5 minutes to 8 minutes and from 1 minute to 2 minutes respectively in response to market feedback. Subject to the approval of the necessary rule amendments by the Securities and Futures Commission (SFC), implementation of the closing auction session is tentatively scheduled to take place in February 2008.

PART A: INTRODUCTION

- 1. On 21 March 2007, HKEx published a consultation paper on "The Introduction of a Closing Auction Session" (Consultation Paper) to invite market views and comments. The proposed closing auction session aims to provide a single-price auction after the completion of the continuous trading session.
- 2. The consultation period closed on 7 May 2007. Overall market feedback indicated strong support for the proposal.
- 3. This consultation conclusions report summarises the main points made by the respondents and provides conclusions as to how we proceed with the proposal. This document should be read in conjunction with the Consultation Paper.
- 4. We would like to take this opportunity to thank all those who have shared with us their views and suggestions during the consultation process.

PART B: OVERALL MARKET FEEDBACK

The Respondents

5. In total, 23 sets of comments were received and the respondents could be grouped into broad categories as follows:

Category	Number of Respondents
Exchange Participants	16
Investment Management and Advisory Firms	3
Banks	2
Broker Association	1
Law Firm	1

6. A list of the respondents is provided in Appendix I. The full text of their submissions is available on the HKEx website at http://www.hkex.com.hk/consul/response/responses1.htm for public reference.

Majority in Favour of the Proposal

- 7. The majority of the respondents (21 out of 23) welcomed the introduction of a closing auction session citing various potential benefits. One respondent was not in favour of the proposal, and one did not indicate a preference. An analysis of the respondents' views is provided in Appendix II.
- 8. HKEx is pleased that the market is responding positively to the proposal. Closing auction is an internationally proven mechanism that aims to provide an accessible, fair, and market-driven method of closing a trading session and determining closing prices. Its implementation will facilitate market participants to complete their clients' orders at closing prices, and will further align the Hong Kong securities market with international practices.
- 9. In addition, many respondents concurred that securities prices determined through a single-price auction are likely to be less susceptible to manipulation compared with the existing closing price determination methodology.
- 10. The benefit of closing auction extends beyond the cash market. The improved price discovery at the close may increase the efficiency of the derivatives markets by making marking-to-market more orderly, and making it easier for derivatives traders to unwind their positions and effect more precise hedging.
- 11. In view of the broad support received, we have decided to adopt the model substantially as proposed in the Consultation Paper, with minor fine-tuning based on suggestions of the respondents.
- 12. During the course of finalising the implementation model, we placed emphasis on understanding and responding to market opinions. To this end we held face-to-face meetings with all interested respondents to ascertain their preference. We appreciate the opportunity of having such open and constructive discussions with the respondents which helped us build an implementation model that is based on market preference.

PART C: IMPLEMENTATION MODEL

- 13. From the outset of the consultation when we formulated the way forward model for the closing auction session, we were guided by the following broad principles:
 - (a) the introduced closing auction mechanism must be fair, transparent, and easily understood by market participants;
 - (b) the closing auction should mirror the existing open auction and other relevant trading practices to the extent possible to simplify implementation efforts by HKEx and market participants; however, incremental enhancements to the introduced mechanism could be considered from time to time after market-wide acceptance for closing auction has been established; and
 - (c) sufficient lead time should be given to ensure market readiness.
- 14. These guiding principles were consistently applied in our deliberations and decision to adopt the implementation model presented below.

Security Coverage

15. Consistent with the original proposal in the Consultation Paper and existing pre-opening auction session, a single-price auction will be used for all equities, warrants, callable bull/bear contracts, exchange traded funds and other securities traded on the Main Board and Growth Enterprise Market during the closing session.

Order Input Period and Pre-order Matching Period

- 16. The closing auction session will begin after the completion of the continuous trading session at 16:00 for normal day trading, or 12:30 for half day trading as the case may be. As explained in the Consultation Paper, there may be no closing auction session if the continuous trading session is terminated or adversely affected by an emergency, including but not limited to fire or other accident, typhoon, rainstorm, computer malfunction and other similar events. Under such circumstances, the current emergency arrangement for determining closing prices will follow (ie the last nominal prices will be used as closing prices).
- 17. All outstanding orders will be automatically carried forward from the continuous trading session to the order input period of the closing auction session as proposed in the Consultation Paper.
- 18. However, based on market feedback, we have extended both the order input period and pre-order matching period as compared with the original proposal¹ in order to allow more order input time by market participants. The following table summarises the revised operating hours for the closing auction session.

¹ The original model proposes that the order input period is 5 minutes and the pre-order matching period is 1 minute.

	Normal Day Trading	Half Day Trading (eg Christmas eve)
Order input period (8 minutes)	16:00 to 16:08	12:30 to 12:38
Pre-order matching period (2 minutes)	16:08 to 16:10	12:38 to 12:40
Commencement of order matching after official end of the trading session	16:10	12:40

Acceptable Order Types and Order Input Rules

- 19. The acceptable order types and rules for order input, amendment and cancellation during the closing auction session will follow the same principles as in the existing pre-opening session.
- 20. During the order input period, both at-auction orders (without specified prices) and at-auction limit orders (with specified prices) will be accepted whereas during the pre-order matching period only at-auction orders will be accepted. Similar to the pre-opening session, orders can only be amended or cancelled during the order input period.
- 21. As an at-auction order is by nature a market order, it enjoys a higher order matching priority than an at-auction limit order. However, it should be noted that even an at-auction order can remain unfilled due to order imbalances on the relevant bid or ask side.

Order Matching and Closing Price Determination

- 22. Once the order matching begins at 16:10 or 12:40 as the case may be, orders will be matched in order type, price and time priority at the final Indicative Equilibrium Price (IEP). The calculation of the IEP follows existing rules adopted in the pre-opening session as shown in Appendix III. Illustrative examples of order matching and IEP calculation are available on the HKEx website (http://www.hkex.com.hk/consul/conclusion/iep.pdf).
- 23. As explained in the Consultation Paper, if the closing auction session does not generate a closing price (ie no final IEP), the existing method using the median of the five 15 second snapshots taken in the last minute of continuous trading will be applied as the closing price.
- 24. A summary of the closing price determination algorithm is included in Appendix IV for reference.

Official Trading Hours and Closing Price Dissemination

- 25. With the introduction of the closing auction session, the official trading hours of the securities market will be extended accordingly. The market will close at 16:10 or 12:40 as the case may be once order matching commences after the closing auction session. Appendix V contains a detailed illustration of the market model after change.
- 26. Under normal business circumstances, HKEx expects that securities closing prices will be disseminated to the market within 5 minutes (ie before 16:15 or 12:45) after the close of the trading session (ie 16:10 or 12:40).

PART D: RESPONSES TO SPECIFIC COMMENTS

27. We set out below our responses to some specific comments which may be of interest to the market. The summary statistics in Appendix II give a broad indication of the frequency with which these comments were raised by respondents.

Trading Hours and Trade Operations Issues

- 28. <u>Comments received</u>: There were comments that the duration for order input under the original proposal might not be sufficient.
- 29. <u>HKEx's response</u>: We have reviewed the practices in selected overseas markets in light of such comments. We recognise that there is no universal consensus as to what is the optimal, or at least adequate, time setting that works best for all. However, in light of the extensive retail participation in the Hong Kong market, we are of the view that a slight extension of the order input period and the pre-order matching period can be justified. We have therefore adjusted the duration of the order input period (extended from 5 minutes to 8 minutes) and that of the pre-order matching period (extended from 1 minute to 2 minutes) in the implementation model explained in paragraph 18.
- 30. <u>Comments received</u>: Some respondents suggested that there should be a blocking period after the close of the continuous trading session to allow sufficient time for order confirmation and avoid confusion during transition to the closing auction session. They mentioned that with a short break they would be able to clearly identify a transition to the closing auction session. Also they could make use of the extra time for order maintenance (eg cancelling outstanding orders carried forward from the continuous trading session per clients' instructions).
- 31. <u>HKEx's response</u>: We do not consider it necessary to include a blocking period. Based on our extensive review of overseas market practices, closing auction session is generally considered as an immediate and uninterrupted extension of the continuous trading session. Also, orders carried forward to the closing auction session can be cancelled or amended per clients' instructions before commencement of the pre-order matching period at 16:08 or 12:38.
- 32. <u>Comments received</u>: Many respondents agreed that the closing time for derivatives trading should be extended to maintain the current window of 15 minutes between the closing of the cash market and derivatives market.
- 33. <u>HKEx's response</u>: Upon implementation of the proposed closing auction session in the cash market, the trading hours for stock index futures/options (SIFO) will be extended to 16:30 for normal day trading, or 13:00 for half day trading as the case may be, except on the last trading day. The time window allows market participants to adjust their hedging positions relating to structured products based on the stock closing prices. There will be no change to the closing time (ie 16:00) for SIFO on the last trading day, as well as for stock futures/options (SFO) in general. The arrangements are largely in line with international practices. The Derivatives Market Consultative Panel was consulted in May 2007 regarding the implications of the proposed closing auction session to the derivatives market, and the Panel supported the proposed changes above. A comparison of the existing and proposed derivatives market closing time is set forth below:

Closing Time except on the Last Trading Day

	Normal Day Trading		Half Day Trading	(eg Christmas eve)
Market	Existing	Proposed	Existing	Proposed
SIFO	16:15	16:30	12:30	13:00
SFO	16:00	16:00	12:30	12:30

Closing Time on the Last Trading Day

Market	Iarket Existing Proposed	
SIFO	16:00	16:00
SFO	16:00	16:00

- 34. <u>Comments received</u>: Some respondents were of the view that input, amendment or cancellation of at-auction limit orders should always be allowed including during the pre-order matching period.
- 35. <u>HKEx's response</u>: We consider the pre-order matching period as an integral part of our auction design and an important element to safeguard against gaming behaviour. During the pre-order matching period, only at-auction orders are accepted and existing orders cannot be modified or cancelled. With this arrangement, it can avoid significant change in the IEP due to withdrawal of orders immediately before the commencement of order matching. So far we see no significant issues or drawbacks for this arrangement during the pre-opening session.
- 36. <u>Comments received</u>: Some respondents suggested eliminating at-auction orders, leaving only at-auction limit orders as the acceptable order type for closing auction. They claimed that removing at-auction orders would encourage market participants to place at-auction limit orders early to gain priority at price and contribute to better price discovery by attracting more liquidity.
- 37. <u>HKEx's response</u>: We are of the view that at-auction orders (with no specified price but a higher execution priority) should not be forbidden and that market participants should be able to choose between order types depending on their price and execution preference. Maintaining the two different order types for auction allow the distinction between orders of market participants who are price sensitive (at-auction limit orders will likely be used) and those who are trying to maximize the chances of execution (at-auction orders will likely be used).
- 38. <u>Comments received</u>: Some respondents mentioned about certain potential limitations of using the existing algorithm for determining the IEP in cases where the order book contains no at-auction limit orders on either the bid or ask side, or both sides. They mentioned that no IEP, and thus no order matching, could be established in such cases. Other respondents questioned the logic of giving priority to at-auction orders.

39. <u>HKEx's response</u>: According to existing rules adopted in the pre-opening session, the IEP of a security will only be calculated if the order book is crossed (ie the highest bid price of the buy at-auction limit orders is equal to or higher than the lowest ask price of the sell at-auction limit orders). When there are no at-auction limit orders on either the bid or ask side, or both sides of the order book, such criterion is not met and there will be no IEP. We agree that additional algorithmic rules could be considered for handling these and other special cases, but since any change to the existing algorithm can have significant market impact we intend to conduct a separate exercise after implementation of the closing auction to review the overall logic together with our Exchange Participants before determining any enhancements to be made.

Short Selling Restrictions

- 40. <u>Comments received</u>: One respondent enquired about whether outstanding short selling orders can be carried forward from the continuous trading session to the closing auction session. A view expressed by another respondent is that short selling orders should be allowed during auction sessions if the tick rule is removed.
- 41. <u>HKEx's response</u>: Under existing rules, a short selling order may only be inputted into AMS/3 during the continuous trading session. We concur with the view that when the tick rule is removed or suspended, short selling should be permitted during auction sessions. We have proposed this change to the SFC for discussion, and a separate announcement would be made to the public once SFC's approval has been sought.

The Random Closing Alternative

- 42. <u>Comments received</u>: There was a divergence of views as to whether auction matching should start at a random or fixed time. Some respondents advocated the random closing method and considered it as a key factor in mitigating gaming attempts. Other respondents expressed a preference for fixed closing as they believed a simple closing auction mechanism mirroring the current open auction will minimize cost/time for the market to adapt to the new closing procedures.
- 43. <u>HKEx's response</u>: Given that the pre-order matching period by design already serves as a control mechanism against gaming behaviour, the random closing method will not be adopted as part of the initial implementation in order to simplify the implementation process. However, we will closely monitor trading behaviour and will evaluate the need for imposing random closing or other control measures for enhancing the closing auction mechanism if warranted.

Implications for Structured Product Liquidity Providers

44. <u>Comments received</u>: One respondent sought clarification on the role of liquidity providers of derivative warrants and exchange traded funds during the closing auction session.

45. <u>HKEx's response</u>: We are of the view that structured product liquidity providers should be exempted from their liquidity provision obligations during the closing auction session. This mirrors the existing model for the pre-opening session.

Implications for Callable Bull/Bear Contracts

- 46. <u>Comments received</u>: One respondent sought clarification on the rules to determine the residual values of a callable bull/bear contract if the closing auction session is to be introduced.
- 47. HKEx's response: Under existing procedures during the pre-opening session, only the final IEP of an underlying Hong Kong equity of a callable bull/bear contract will be considered for determining whether a Mandatory Call Event (MCE) is triggered. Before the end of the two following trading sessions after the session in which the MCE occurred, the respective issuer will have to publish an announcement on the residual value and any other related information. The pre-opening session and morning session are considered as one trading session in this context. We are of the view that a consistent approach should be adopted for the closing auction session. As such, during the closing auction session, only the final IEP will be considered for determining whether a MCE is triggered, and the afternoon session and the closing auction session should be considered as one single session for the purpose of determining the residual value.

PART E: IMPLEMENTATION PLAN

- 48. The implementation model proposed in this document is largely similar to the original model except that the durations of the order input period and pre-order matching period have been extended to 8 minutes and 2 minutes respectively in response to market feedback.
- 49. As the effective trading hours of the cash and derivatives markets will be extended due to the implementation of the closing auction session, HKEx Listing Division will propose to the Listing Committee to revise the operational schedules for news dissemination of decisions on dividends and results by listed issuers from the existing practice of after 16:15 to after 16:30.
- 50. We will submit the necessary trading rule amendments governing the closing auction session to the SFC for approval in due course.
- 51. All finalised amendments to the Trading Rules and Listing Rules will be separately announced to the public.
- 52. Investor education and training for practitioners are crucial for market acceptance and smooth implementation of the proposed closing auction. We will provide extensive training and educational materials for promoting public awareness of the operation of the closing auction session prior to its implementation.
- 53. We recognise the need to set a realistic timeframe for all market participants to plan ahead. It is tentatively scheduled that the implementation of the closing auction session will take place in February 2008.

APPENDIX I: LIST OF RESPONDENTS

Exchange Participants

Barclays Capital Asia Limited

BNP Paribas

BOCI Securities Limited

Celestial Securities Limited

Citigroup Global Capital Markets

Hang Seng Securities Limited

HSBC Broking Services (Asia) Limited

I-Access Investors Limited

J.P. Morgan Broking (Hong Kong) Limited

KBC Financial Products Trading Hong Kong Limited

Lehman Brothers

Macquarie Equities (Asia) Limited

Merrill Lynch (Asia Pacific) Limited

Morgan Stanley Dean Witter Asia Limited / Morgan Stanley Dean Witter Hong Kong Securities Limited

SG Securities (HK) Limited

UBS Securities Hong Kong Limited

Investment Management and Advisory Firms

Fidelity Investments Management (HK) Limited

Gandhara Advisors Asia Limited

HSBC Investments (Hong Kong) Limited

Banks

The Bank of East Asia Limited

The Hongkong and Shanghai Banking Corporation Limited

Broker Association

Hong Kong Stockbrokers Association

Law Firm

Clifford Chance

APPENDIX II: SUMMARY STATISTICS OF RESPONDENTS' VIEWS

Respondents' Views on the Closing Auction Proposal	Number of	Addressed under
	Responses	Paragraph
■ In favour	21	#7
■ Neutral	0	
■ Not in favour	1	
 Not indicated 	1	

Comments on Trading Hours and Trade Operations Issues	Number of Responses	Addressed under Paragraph
 Suggested that the originally proposed order input period may not be sufficient 	4	#28 and 29
 Proposed to include a blocking period before the order input period 	2	#30 and 31
 Agreed that the closing time for derivatives trading should be extended to maintain the current window of 15 minutes between the closing of the cash market and derivatives market 	5	#32 and 33
 Suggested that amendment or cancellation of orders should always be allowed, including during the pre-order matching period 	5	#34 and 35
 Suggested eliminating at-auction orders, leaving only at-auction limit orders as the acceptable order type for closing auction. 	2	#36 and 37
 Mentioned about certain potential limitations of using the existing algorithm for determining the IEP 	4	#38 and 39
Sought clarification on short selling restrictions	1	#40 and 41
 Sought clarification on the implications for structured product liquidity providers 	1	#44 and 45
 Sought clarification on the implications for callable bull/bear contracts 	1	#46 and 47

Respondents' Views on Random Closing Alternative	Number of	Addressed under
	Responses	Paragraph
■ In favour	5	#42 and 43
Neutral	2	
Not in favour	3	
Not indicated	13	

Lead Time Required for System Changes	Number of Responses	Addressed under Paragraph
 Minimal or less than 1 month 	3	#53
■ 1 month to 3 months	2	
 More than 3 months but less than 6 months 	1	
• 6 months or more	2	
Not precisely indicated	15	

APPENDIX III: RULES FOR DETERMINING THE IEP

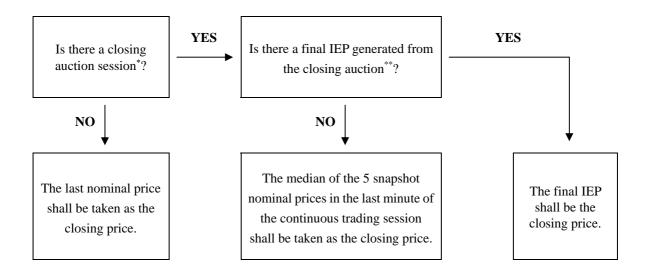
Extracts from the Rules of the Exchange

- An IEP will be calculated according to the following rules only if the highest bid price of the buy at-auction limit orders is equal to or higher than the lowest ask price of the sell at-auction limit orders:
 - (a) the IEP shall be one of the bid prices or ask prices which falls within the range of the highest bid price of the buy at-auction limit orders and the lowest ask price of the sell at-auction limit orders (inclusive of both prices) at which the aggregate size of the trades to be concluded based on the methodology specified in Rule 517(1)(a) is maximised;
 - (b) if more than one price satisfies Rule 501H(1)(a), the IEP shall be the price at which the normal order imbalance is the lowest. For the purposes hereof, normal order imbalance, in relation to a price, means the difference between the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price and the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price;
 - (c) if more than one price satisfies Rule 501H(1)(b), the IEP shall be-
 - (i) the highest of such prices if in relation to each and every of such prices, the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price is greater than the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price; or
 - (ii) the lowest of such prices if in relation to each and every of such prices, the aggregate size of the buy at-auction orders and the buy at-auction limit orders with bid prices at or better than that price is smaller than the aggregate size of the sell at-auction orders and the sell at-auction limit orders with ask prices at or better than that price;
 - (d) if more than one price satisfies Rule 501H(1)(b) and 501H(1)(c) does not apply, the IEP shall be the price which is the closest to the previous closing price*. If two prices are of equidistant from the previous closing price*, the IEP shall be the higher of the two prices. However, if the previous closing price* is not available, the IEP shall be the highest of such prices.

14

^{*} While the previous closing price is used as a reference price for determining the IEP during the pre-opening session under the existing Rule 501H(1)(d), a different reference price (eg the last nominal price during the preceding continuous trading session) will probably be applied for IEP determination during the closing auction session.

APPENDIX IV: SUMMARY OF CLOSING PRICE DETERMINATION ALGORITHM



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^{*} There may be no closing auction session if the continuous trading session is terminated or adversely affected by an emergency, including but not limited to fire or other accident, typhoon, rainstorm, computer malfunction and other similar events.

^{**} Consistent with existing rules adopted in the pre-opening session, the final IEP of a security will only be calculated if the order book is crossed (ie the highest bid price of the buy at-auction limit orders is equal to or higher than the lowest ask price of the sell at-auction limit orders) at the end of the pre-order matching period. In the case where such criterion is not met, there will be neither auction matching nor final IEP generated from the closing auction.

APPENDIX V: MARKET MODEL AND OFFICIAL TRADING HOURS AFTER **CHANGE**

For Normal Day Trading

Trading Sessions		Pre-op	pening		Morning	Extended Morning	Afternoon Closing Au		Auction
Auction Periods	Order Input	Pre-order Matching	Order Matching	Blocking	N/A	N/A N/A N/A		Order Input	Pre-order Matching
Operating Hours	9:30 - 9:45	9:45 - 9:50	9:50 - 9:58	9:58 - 10:00	10:00 - 12:30	12:30 - 14:30	14:30 - 16:00	16:00 - 16:08	16:08 - 16:10
Market Mechanism		Single-price	Call Auction		Continuous Trading			Single-price Call Auction	
Security Coverage			able Bull/Bear Contraction on the Main Board and			Extended Trading Securities All Equities, Warrants, Callable Bull/Bear Co Exchange Traded Funds and Other Securi Traded on the Main Board and Growth Enterpris			er Securities
Order Entry	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Acceptable Order Types	At-auction / At-auction Limit	At-auction	N/A	N/A	Limit / Enhanced Limit / Special Limit			At-auction / At-auction Limit	At-auction
Order Amendment and Cancellation	Yes	No	No	No	Yes	Yes	Yes	Yes	No

For Half Day Trading (e.g. Christmas Eve)

Trading Sessions		Pre-o	pening	Morning	Closing Auction				
Auction Periods	Order Input Pre-order Matching		Order Matching	Order Matching Blocking		Order Input	Pre-order Matching		
Operating Hours	9:30 - 9:45	9:45 - 9:50	9:50 - 9:58	9:58 - 10:00	10:00 - 12:30	12:30 - 12:38	12:38 - 12:40		
Market Mechanism	Single-price Call Auction Continuous Trading Single-price Call Auction								
Security Coverage	All Equities, Warrants, Callable Bull/Bear Contracts, Exchange Traded Funds and Other Securities Traded on the Main Board and Growth Enterprise Market								
Order Entry	Yes	Yes	No	No	Yes	Yes	Yes		
Acceptable Order Types	At-auction / At-auction Limit	At-auction	N/A	N/A	Limit / Enhanced Limit / Special Limit	At-auction / At-auction Limit	At-auction		
Order Amendment and Cancellation	Yes	No	No	No	Yes	Yes	No		



△ Matching of closing auction orders commences after official end of the trading session at 16:10 or 12:40 as the case may be.



Appendix 3

Turnover Statistics of Closing Auction Session in relation to Market Total (26-30 May 2008)

Date	Total market turnover of the day	Turnover of Closing Auction Session	% in Closing Auction Session	Closing Auction Session turnover of MSCI stocks [1]	% from MSCI Stocks	Closing Auction Session turnover of Non-MSCI stocks [2]	from Non-MSCI Stocks
	(HK\$ million)	(HK\$ million)		(HK\$ million)		(HK\$ million)	
26-May-08	76,868	2,029	2.6%	1,618	79.7%	411	20.3%
27-May-08	54,898	2,068	3.8%	1,653	79.9%	416	20.1%
28-May-08	60,377	1,965	3.3%	1,576	80.2%	389	19.8%
29-May-08	64,328	2,155	3.4%	1,810	84.0%	345	16.0%
30-May-08	85,802	14,219	16.6%	13,729	96.6%	489	3.4%

- 1. The 167 HK listed stocks impacted by the MSCI rebalancing on 30 May 2008.
- 2. All other Hong Kong listed stocks not including the 167 stocks affected by the MSCI rebalancing on 30 May 2008. These include HSBC, Tracker Fund, all derivative warrants, Callable Bull/Bear Contracts and others.

 $\frac{Appendix\ 4}{Price\ Volatility\ of\ the\ 21\ MSCI\ Stocks\ with\ Price\ Deviation\ of\ More\ than\ 5\ Per\ Cent\ after\ Closing\ Auction\ Session\ on\ 30\ May\ 2008}$

				Day high/ [low]	Intra-day volatility			% change
Stock Code	Stock name	Day high	Day low	before 16:00	before closing	Price at 16:00	Price at 16:10	(16:10 to 16:00)
		(HK\$)	(HK\$)	(HK\$)		(HK\$)	(HK\$)	
2	CLP HOLDINGS	70.50	63.60	66.20	4.1%	65.35	70.50	7.9%
69	SHANGRI-LA ASIA	26.30	21.80	23.30	6.9%	23.20	26.30	13.4%
276	MONGOLIA ENERGY	17.70	14.40	16.16	12.2%	14.98	17.70	18.2%
511	TVB	51.80	48.80	50.90	4.3%	49.20	51.80	5.3%
604	SHENZHEN INVEST	3.45	3.22	[3.36]	2.7%	3.40	3.22	-5.3%
606	CHINA AGRI	5.59	5.28	5.40	2.3%	5.29	5.59	5.7%
754	HOPSON DEV HOLD	16.64	14.10	15.60	10.6%	15.60	16.64	6.7%
903	TPV TECHNOLOGY	5.41	4.80	[5.10]	6.1%	5.14	4.80	-6.6%
981	SMIC	0.56	0.48	[0.51]	9.8%	0.51	0.48	-5.9%
1072	DONGFANG ELETRIC	27.00	25.00	25.80	3.2%	25.50	27.00	5.9%
1114	BRILLIANCE CHI	1.34	1.21	[1.26]	6.3%	1.28	1.21	-5.5%
1186	CHINA RAIL CONS	14.00	12.30	12.66	2.9%	12.48	14.00	12.2%
1224	C C LAND	8.02	6.28	6.64	5.7%	6.42	8.02	24.9%
1393	HIDILI INDUSTRY	15.20	13.56	13.96	2.9%	13.70	15.20	10.9%
1880	BELLE INT'L	9.78	8.35	8.88	6.3%	8.61	9.78	13.6%
2626	HNC	3.02	2.61	[2.90]	4.1%	2.96	2.61	-11.8%
2688	XINAO GAS	14.02	12.60	[13.10]	7.0%	13.62	12.60	-7.5%
2689	ND PAPER	8.50	7.51	7.90	5.2%	7.82	8.50	8.7%
3368	PARKSON GROUP	67.00	61.05	65.00	6.5%	63.20	67.00	6.0%
3377	SINO-OCEAN LAND	6.95	6.21	6.46	4.0%	6.30	6.95	10.3%
3383	AGILE PROPERTY	10.20	9.23	9.70	5.1%	9.63	10.20	5.9%