



INFORMATION PAPER **ON AFTER-HOURS FUTURES TRADING**

February 2012



Hong Kong Exchanges and Clearing Limited
香港交易及結算所有限公司

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SECTION I: EXECUTIVE SUMMARY

1. This information paper explains the detailed operating model of the after-hours futures trading (AHFT) for HKEx's Exchange Participants (EPs) and Clearing Participants (CPs) regardless of whether they have any interest in participating in the AHFT. This information paper should be read in conjunction with the consultation paper and the consultation conclusion paper previously released by HKEx.
2. A consultation paper on AHFT was published on 30 May 2011 and the consultation was closed on 8 July 2011. 455 responses (including 6 late submissions) were received.
3. With majority support from our EPs/CPs, market practitioners and individuals, HKEx will proceed with the AHFT proposal with various refinements to the operational arrangements after considering responses received.
4. HKEx will introduce an after-hours trading session (T+1 Session) for the futures market after the close of the regular trading session (T Session). The T+1 Session will open at 5:00 p.m. and end at 11:00 p.m. At the same time, a T+1 Clearing Session (NTD Session) will also be introduced, which will start from 5:00 p.m. and end 45 minutes after the closing of T+1 Session, i.e. 11:45 p.m., while the existing T Clearing Session (CTD Session) will open one hour earlier.
5. At the initial stage, Hang Seng Index (HSI) futures, H-shares Index (HHI) futures and gold futures will be available for trading in the T+1 Session. Other derivatives products might be considered at a later stage.
6. AHFT will tentatively take place in the second half of 2012, subject to the approval of the necessary rule amendments by the Securities and Futures Commission (SFC) and market readiness.
7. For Futures EPs/CPs which would like to participate in AHFT, they will need to prepare their systems and be ready for market rehearsals by mid-2012. Detailed implementation plan and schedule will be announced in due course.
8. For Futures EPs/CPs who do not intend to participate in AHFT, they are recommended to review the relevant changes due to AHFT and take necessary actions if any to ensure they

could comply with the relevant changes from operational and system perspectives, in particular the newly introduced mandatory variation adjustments and margin call.

SECTION II: INTRODUCTION

9. The purpose of this information paper is to present an overview and operational details of the AHFT.
10. Global financial markets are inter-related in many ways. Financial news and events in Europe or the United States (US) can affect Asian financial markets including Hong Kong, and vice versa. Currently, Hong Kong investors are unable to hedge or adjust their positions in HKEx's futures market outside the regular trading hours in case there are major financial news or events being announced during European or US time zones.
11. Most major securities exchanges close their securities markets after their regular trading hours, but most derivatives exchanges trade derivatives in the extended after-hours trading sessions to enable hedging activities in response to market moving events at night. The trading hours of most derivatives exchanges' stock index futures markets range from 13 to 23 hours each business day. The volume of after-hours trading in the major overseas stock index futures amounted from 15% to 37% of the volume in their respective day sessions during the period from October 2010 to February 2011.
12. Many futures brokers in Hong Kong are still open for business after the regular trading hours to offer European and US derivatives trading for their clients. These brokers would be well positioned to participate in the after-hours trading session for the Hong Kong futures market. The availability of after-hours trading services offered by brokers indicates that investors have trading demand during the night time.
13. The strategic and business reasons for HKEx to provide AHFT are that:
 - a) Investors will benefit from having an AHFT platform to hedge or adjust their positions in response to market news and events in the European and US time zones;
 - b) With Hong Kong becoming a Renminbi (RMB) offshore centre, AHFT will enable HKEx to serve international trading interest relating to RMB products in the future;
 - c) The capability for after-hours trading is a prerequisite for HKEx to support asset classes traded on a global basis including commodities and foreign exchange;
 - d) Given overseas exchange experience, AHFT should be a source of business growth; and

- e) Over time, AHFT can attract European and US investors to participate in HKEx's derivatives market both during and after their working hours.
14. A consultation paper on AHFT was published on 30 May 2011 and the consultation was closed on 8 July 2011. 455 responses (including 6 late submissions) were received.
15. With majority support from our EPs/CPs, market practitioners and individuals, HKEx will proceed with the AHFT proposal with various refinements to the operational arrangements after considering responses received.
16. The final AHFT model is set out as follows:
- a) HKEx will introduce an AHFT session for the futures market (T+1 Session).
 - b) At the initial stage, HSI futures, HHI futures and gold futures will be traded in the T+1 Session. Other derivatives products might be considered at a later stage.
 - c) After the close of the regular trading session (T Session) at 4:15 p.m. for stock index futures, the T+1 Session will open at 5:00 p.m. and end at 11:00 p.m.
 - d) The closing time of T Session for gold futures will be adjusted to 4:15 p.m. (including Last Trading Day), while the T+1 Session will follow stock index futures, i.e. open at 5:00 p.m. and end at 11:00 p.m.
 - e) All trades transacted in the T+1 Session will be registered as T+1 Trades and cleared on the following Business Day.
 - f) A new T+1 Clearing Session (NTD Session) from 5:00 p.m. to 11:45 p.m. will be introduced and the existing T Clearing Session (CTD Session) will open one hour earlier for CPs to perform their post-trade activities.
 - g) A 5% price limit up/down mechanism will replace the original proposed price banding mechanism set out in the consultation paper.
 - h) HKEx will manage the risk of AHFT through appropriate regular, ad-hoc and/or real time monitoring during the T+1 Session and via a new mandatory variation adjustment and margin call following the market open of each T Session and payable by 12:00 noon.

For details of the Consultation Conclusion and Final Proposal, please refer to:

<http://www.hkex.com.hk/eng/newsconsul/mktconsul/Documents/cp201105cc.pdf>

17. An overview of the AHFT model and detailed operational details are covered in the following sections.

SECTION III: OVERVIEW OF AHFT

18. After the close of the regular trading session (T Session), HKEx will introduce an after-hours trading session for the futures market (T+1 Session). The T+1 Session will open at 5:00 p.m. and end at 11:00 p.m.
19. At the initial stage, HSI futures, HHI futures and gold futures will be available for trading in the T+1 Session. Other derivatives products might be considered at a later stage.
20. All trades transacted in the T+1 Session will be registered as T+1 Trades and cleared together with trades transacted in the T Session on the following Business Day.
21. HKEx will manage the risk of AHFT through appropriate regular, ad-hoc and/or real time monitoring during the T+1 Session and via a new mandatory variation adjustment and margin call following the market open of each T Session and payable by 12:00 noon.
22. Operational details of the trading, clearing and risk management arrangements under AHFT model are described in the next section.

SECTION IV: OPERATIONAL DETAILS

Proposed Operating Arrangements

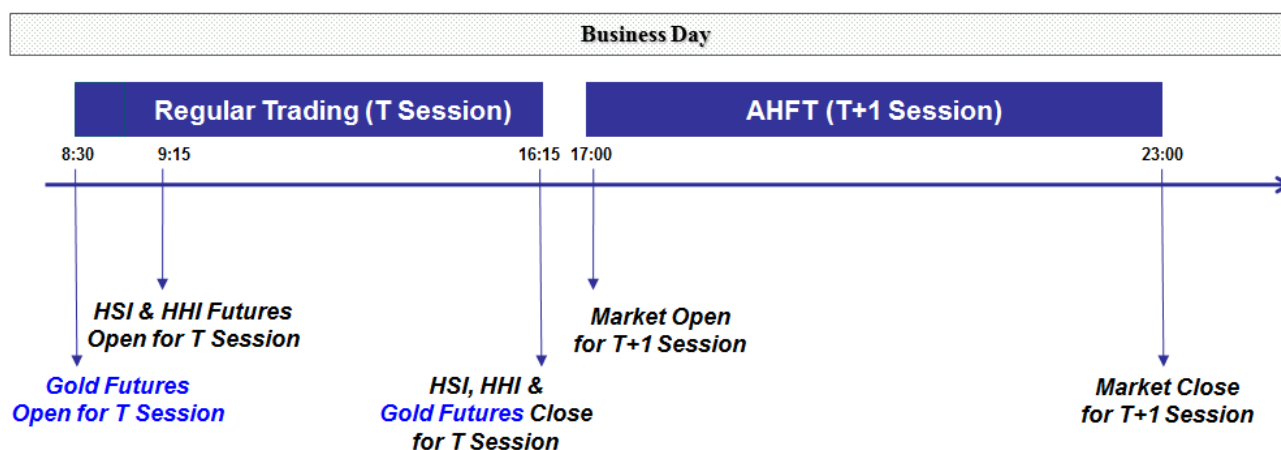
23. This part sets out the operating arrangements for AHFT with regard to products, trading, clearing and risk management:

Products

24. At the initial stage, HSI futures, HHI futures and gold futures will be introduced for AHFT. Subject to the development of trading liquidity in the main stock index futures contracts, mini-HSI futures and mini-HHI futures could be introduced at the next stage. Trading arrangements of the securities market will not be affected. As and when market conditions warrant, HKEx might also consider introducing other and new derivatives products for AHFT in the future.

Trading

25. AHFT Trading Hours



A new trading session (T+1 Session) will be introduced for the futures market. The opening time of the T+1 Session will be 45 minutes after the close of the regular trading session (T Session), i.e. 5:00 p.m. for both stock index futures and gold futures to provide sufficient time for EPs/CPs to handle internal operations before the T+1 Session begins. Trades executed during the T+1 Session (T+1 Trades) will be registered as the following day's trades.

There is no Pre-Market Opening (Auction) Session for the T+1 Session. The last trading time for gold futures will also be adjusted to 4:15 p.m. so that it will be in line with the adjustment of the T Session close.

The T+1 Session will end at 11:00 p.m. After the close of the T+1 Session, additional 45 minutes will be allowed for EPs/CPs to perform post-trade activities (please refer to paragraphs 36 and 37 for details). The T+1 Session and this 45 minutes window will not go beyond 12:00 mid-night and cross to the next calendar day such that system enhancements required for both EPs/CPs and HKEx will be less complex. The T+1 Session will cover the most active period in the European market (i.e. up to 3:00 p.m. London Winter time or 4:00 p.m. London Summer time), as well as the morning of the US market (i.e. up to 10:00 a.m. New York Winter time or 11:00 a.m. New York Summer time).

26. Holiday Arrangements

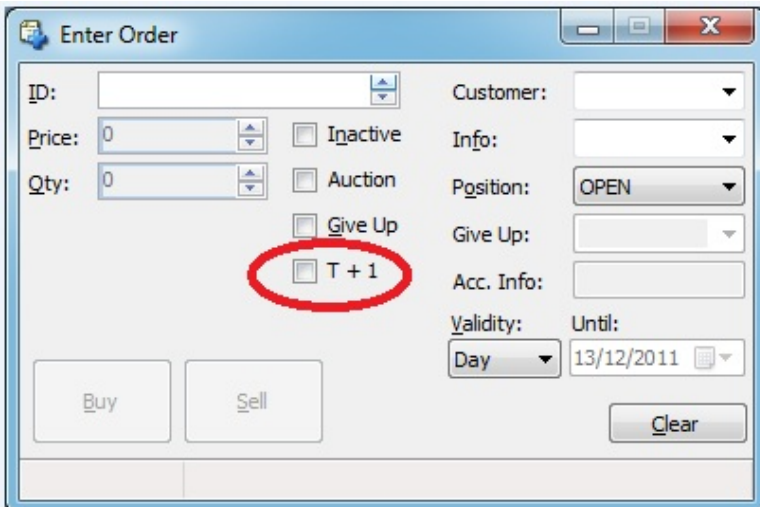
There will be no T+1 Session on a Business Day which is:

- a Hong Kong public holiday; or
- a half-trading day in the HKEx's securities market; or
- a bank holiday in both the United Kingdom (UK) and the US.

27. Typhoon or Black Rainstorm Arrangements

If Typhoon Signal No. 8 or above is hoisted or a Black Rainstorm Warning is issued and not lowered or discontinued before 12:00 noon on a Business Day, there will be no T+1 Session.

28. Order Types

The image shows a screenshot of a software window titled "Enter Order". The window has a light blue header bar with a small icon on the left and standard window controls (minimize, maximize, close) on the right. The main area is divided into several sections. On the left, there are input fields for "ID:", "Price:" (with a value of 0), and "Qty:" (with a value of 0). To the right of these fields are four checkboxes: "Inactive", "Auction", "Give Up", and "T + 1". The "T + 1" checkbox is circled in red. Below these checkboxes are two buttons labeled "Buy" and "Sell". On the right side of the window, there are several dropdown menus and text boxes: "Customer:", "Info:", "Position:" (set to "OPEN"), "Give Up:", "Acc. Info:", "Validity:" (set to "Day"), and "Until:" (set to "13/12/2011"). At the bottom right, there is a "Clear" button.

For EPs and their clients participating in the AHFT, they need to select the order attribute "T+1" when entering their rest of day orders, until expiry orders and specified date orders

for those orders that should be effective for both T Session and T+1 Session. These orders with “T+1” attribute will be carried forward from T Session to T+1 Session on the same Business Day, and until expiry/specified date orders will be further carried forward to the T Session on the next Business Day and so on whilst outstanding. EPs will need to inform their clients of the implications when participating in the T+1 Session and to ensure appropriate levels of staffing to service T+1 Session trading.

Fill-or-kill orders and fill-and-kill orders can also be input during the T+1 Session, in which they will be executed (or not) immediately. The “T+1” attribute for these two order types is disabled so there is no need to check it for T+1 Session trading.

By default all rest of day orders, until expiry orders and specified date orders (in which the “T+1” attribute is not checked), will be effective only in T Session, when until expiry/specified date orders will be temporarily inactivated in T+1 Session and re-activated in the next T Session and so on whilst outstanding. EPs not participating in the AHFT will not be affected.

For gold futures orders, as their “T+1” attribute is enabled even it is not checked, all rest of day orders will be effective in both T and T+1 Session on the same Business Day, when until expiry orders and specified date orders will be carried forward continuously through the next T and T+1 Sessions and so on whilst outstanding.

OAPI users may choose the default value of the “T+1” attribute as enabled or disabled according to their own business need.

Please refer to Appendix A for the table that defines order type validity.

29. Handling of Error Trades

Existing error trade rules will apply in the T+1 Session. To reduce the potential impact of a sequence of error trades, an absolute price limit will be introduced in HKATS for the T+1 Session, which will reject input of buy orders with a limit price higher than or sell orders with a limit price lower than 5% of the last traded price of the spot month series¹ in T Session.

The HKATS will reject any input of all limit buy/sell orders outside the upper/lower price limit that are far away from the boundary of this reference limit. Orders inside the

¹ On the last trading day, the spot month series will be the next month futures contract (e.g., Feb 2012) instead of the current spot month futures contract (e.g., Jan 2012), since the current spot month contract has already expired when the T+1 Session begins.

upper/lower price limit will still be allowed to be placed even the prevailing market price reaches either the upper/lower limit, i.e., the market is still open in this case. For different scenarios and the consideration combining error trade rules and price limit, please refer to Appendices B and C.

This price limit also applies to other series in the same market in T+1 Session, i.e., other futures series (non-spot month or far-month series) will be subject to the same price limit derived from the last traded price of the spot month futures series in T Session.

For example, the last traded price of the spot month series in T Session is 20,000 points for HSI futures.

| HSI futures order price | Limit buy orders for all contract months | Limit sell orders for all contract months |
|---|--|---|
| Greater than 21,000 (upper price limit) | Reject | Accept |
| Lower than 19,000 (lower price limit) | Accept | Reject |

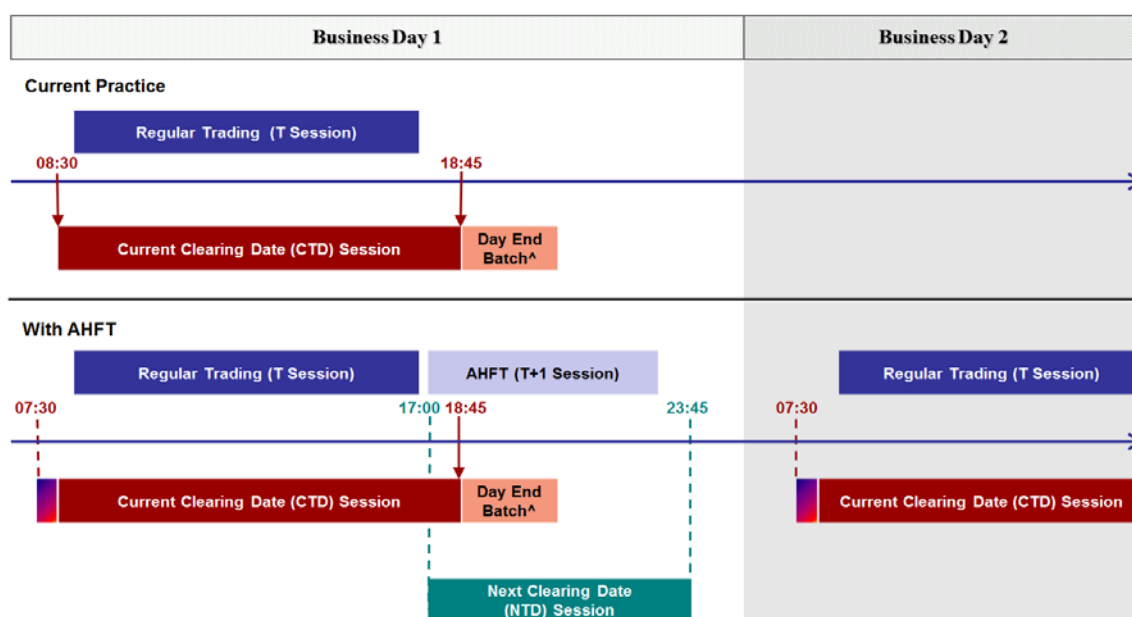
30. Block Trade Facility, Bulletin Board and Non-Standard Combination Orders Not Applicable

At the initial stage, the Block Trade Facility will not be available in the T+1 Session. As T+1 Session at the inception will cover stock index futures and gold futures only, demand for the Block Trade Facility is expected to be limited (block trades in stock index futures contracts accounted for less than 1% of the total turnover of stock index futures in the second half of 2010). HKEx will consider introducing the Block Trade Facility when options products are available for trading in the T+1 Session.

Similar rationale applies to Bulletin Board orders and Non-Standard Combination Orders, that they are also not available for trading in the T+1 Session in the initial stage.

Clearing

31. To enable CPs to perform post-trades activities for T Session while the trading of T+1 Session and the respective post-trades activities starts at 5:00 p.m., a dual clearing session arrangement will be introduced. DCASS online service will be extended, as illustrated below:



32. Existing T Clearing Session (extended)

To provide more time for CPs to perform post-trade activities, the existing T Clearing Session (CTD Session) will start one hour earlier (i.e. 7:30 a.m.) while the end time of the existing T Clearing Session (CTD Session) will remain unchanged (i.e. 6:45 p.m.).

33. New T+1 Clearing Session

To allow CPs to perform post-trade activities on T+1 Trades during the T+1 Session, a T+1 Clearing Session (NTD Session) will be introduced, for futures products with AHFT.

NTD Session will start upon the opening of the T+1 Session from 5:00 p.m. and end at 11:45 p.m. (i.e. 45 minutes after the T+1 Session close at 11:00 p.m.). This additional 45 minutes, together with the extended hour in the CTD Session on the next Business Day, offer ample time to CPs to perform position management before the Mandatory Market Open Variation Adjustment (VA) and Margin Call on the next Business Day.

34. Position recording

Positions are maintained according to clearing dates. Currently, there are two types of positions being recorded: Overnight (O/N) Position, Current Clearing Date (CTD) Position. For AHFT, a new type of position, namely Next Clearing Date (NTD) Position will be introduced.

With AHFT, the position recording for both O/N Position and CTD Position will be same as existing, while NTD Position will record activities performed during NTD Session, which is further elaborated as follows:

O/N Position represents the finalized end-of-day CTD Position. It will remain unchanged throughout each Business Day.

CTD Position represents the real-time position during CTD Session, which will be cleared on the current Business Day and therefore is used for the day-end margin calculation for T Clearing Session. Once the CTD Position is finalized after close of CTD Session, it will remain unchanged and serve as a preliminary O/N Position for calculating the position of the following Business Day.

NTD Position represents the position to be cleared on the next Business Day. During the CTD Session, all updates to CTD Position will also be reflected in NTD Position. On any Business Day, before the start of NTD Session, NTD Position should always be the same as CTD Position. Upon start of the NTD Session, if an EP transacted a T+1 Trade, or if a CP performed post-trade action on T+1 Trade or NTD Position, such activities will only be recorded under NTD Position. Hence, NTD Position might be different from CTD Position after the start of NTD Session.

35. For trades transacted, position recording can be summarized as follows:

- a) A trade transacted during T Session will be cleared on the current Business Day and recorded under CTD Position (and thereby indirectly updated the NTD Position);
- b) A trade transacted during T+1 Session will be cleared on the following Business Day and recorded under NTD Position only.

36. For post-trade activities performed, position recording can be summarized as follows:

- a) Post-trade action performed on T Trade or CTD Position during CTD Session will be updated and recorded under CTD Position (and thereby indirectly updated the NTD Position);
- b) Post-trade action performed on T+1 Trade or NTD Position during NTD Session will be updated and recorded under NTD Position only.

An example on position recording of O/N Position, CTD Position and NTD Position throughout a Business Day is illustrated in Appendix D.

37. Post-trade activities for AHFT products

- a) Post-trade action for AHFT products performed on T Trades and T-1 Trades / CTD Positions will be available one hour earlier (i.e. 7:30 a.m.) and the end time remains unchanged at 6:45 p.m.
- b) Post-trade activities on T+1 Trades / NTD Positions will be available from 5:00 p.m. until 11:45 p.m. as listed below:

| Post-trade activities (for AHFT products) | <u>Before</u> finalization of CTD Position | <u>After</u> finalization of CTD Position |
|--|---|--|
| New Trade / Trade Management | Only allow Open Trades | ✓ |
| Position Management | ✗ | ✓ |

Risk Management

38. In the absence of banking support to facilitate the settlement of intra-day calls, no intra-day variation adjustment or margin call will be made during the T+1 Session regardless of whether there is a large market fluctuation. Instead, the following additional risk measures will be imposed to mitigate the counterparty risks associated with AHFT.
39. Capital-based Position Limits (CBPL) Monitoring during T+1 Session

The counterparty risk during the T+1 Session will be managed by a regular monitoring of the CPs' net² CBPL utilization based on the latest market prices and CPs' positions. The CBPL monitoring aims to ensure that the exposures of CPs participating in the AHFT are commensurate with their financial strength in terms of their levels of liquid capital. Ad-hoc monitoring of selected CPs will be conducted where appropriate.

CPs exceeding their net CBPL will be requested to observe compliance by the end of the same T+1 Session. Specific monitoring of the trading activities of the concerned CPs will be performed during the T+1 Session. The concerned CPs may be disconnected from HKEx's trading system and subject to closing out action by the clearing house if they continue to engage in transactions which would result in an increase in their risk exposure.

If CPs anticipate that they may trade beyond their net CBPL in the T+1 Session, they may wish to consider depositing extra funds with the clearing house in advance during normal banking hours³.

40. Mandatory Market Open Variation Adjustment (VA) and Margin Call

A mandatory VA and margin call will be introduced to markets with T+1 Session following the market open of each regular trading session based on the morning Calculated Opening Prices⁴. Unlike the current ad-hoc intra-day call which includes VA only, this mandatory call will include both VA and margin⁵. The mandatory VA and

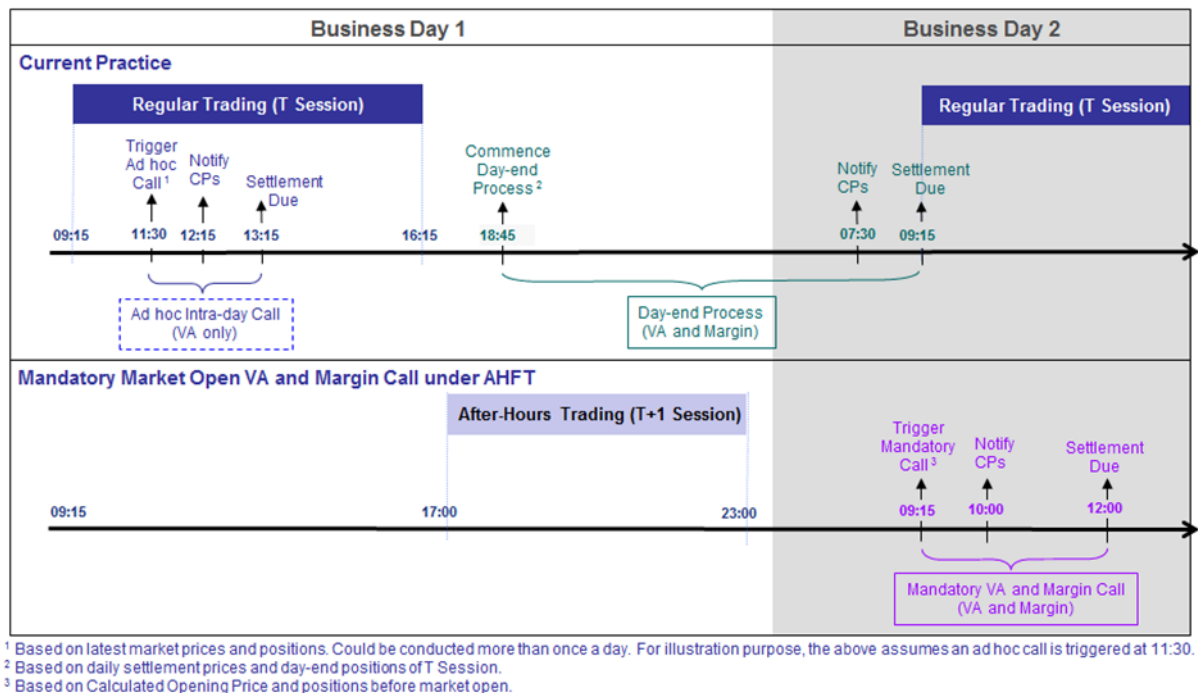
² Only net CBPL is monitored because gross CBPL does not reflect CPs' real exposures during the T+1 Session as the majority of the post-trade activities would have yet to be performed.

³ To meet the 25% additional clearing house margin pursuant to Section 5.2 of HKCC Procedures.

⁴ The Calculated Opening Price will be used for spot-month contract while theoretical prices will be used for far-month contracts. If the Calculated Opening Price is not available, market price shortly after the market open will be used.

⁵ Clients' margins held by CPs in relation to the positions in T Session should generally be sufficient for CPs to cover the proposed clearing house's mandatory call without further margin calls on their clients unless their clients' margins have been eroded to an amount below the maintenance margin level.

margin call on stock index products will be issued to CPs by 10:00 a.m. and the payment should be settled by 12:00 noon. An illustration of the clearing house margin collection timeline is set out below.



41. It is important to note that all CPs, including those not participating in the AHFT, will be subject to the mandatory market open VA and margin call. The following measures will be implemented to minimize impacts on CPs:

- In addition to the 45 minutes between 11:00 p.m. (close of T+1 Session) and 11:45 p.m. (end of NTD Session), an extra hour window up to 8:45 a.m.⁶ will be available to CPs to perform post-trade activities for the T+1 Session before the mandatory market open VA and margin call is triggered so as to ensure margin is being calculated based on accurate positions;
- Call amounts less than \$2 million will not be collected; and
- CPs who have their positions reduced during the T+1 Session or made a gain on their portfolio can have their margin released or profit realized earlier under this mandatory call. CPs would be allowed to withdraw such margin / profit with same date value if they request the withdrawal in accordance with the established procedures.

Please refer to Appendix E for the examples on mandatory market open VA and margin call.

⁶ For stock index products.

SECTION V: IMPACTS TO PARTICIPANTS

42. EPs'/CPs' Participation in the AHFT is Optional

EPs/CPs may have different considerations such as their clients' trading interest and operational / resources requirements. Whether to participate in the AHFT is a business decision for each EP/CP to make on its own; however, we anticipate that there will be pressure from clients for those EPs that decide not to participate. For EPs/CPs which are currently offering European or the US derivatives trading for their clients, the AHFT will be an opportunity to expand their existing business with limited operational impact. For EPs/CPs currently without night desk operations, they may consider the needs of their clients and the potential business prospect and decide whether they will participate or only provide limited services to their clients in AHFT. In any event, EPs/CPs should ensure that they observe the SFC's Code of Conduct when dealing with clients on all matters in relation to the T+1 Session.

43. Operational Requirements for EPs/CPs that Decided to Participate

EPs/CPs that decided to participate in the AHFT should ensure that sufficient manpower and resources are available to support their AHFT operations and that all staffs involved in AHFT business are suitable, adequately trained and properly supervised. EPs'/CPs' systems should be ready to support the functions necessary for the AHFT including trading, clearing, risk monitoring, back office and client support. EPs/CPs should also review their Client Agreements and/or contracts with specific terms and conditions of service level and support to ensure they are also applicable and can be extended for T+1 Session. As for clearing, systems of EPs/CPs should be able to support position keeping for both CTD Session and NTD Session.

44. System and Operational Implication

Participating in the AHFT will involve enhancements to EPs'/CPs' systems. All EPs/CPs, including those decide not to participate would be subject to the following system and operational implications:

- a) All CLICK/DCASS Terminal users would be required to install / deploy with a new packaged software provided by HKEx and EPs/CPs that decided to participate would also be required to participate in the market rehearsals;

- b) All EPs/CPs using OAPIs would be required to enhance their OAPIs and participate in the market rehearsals:
 - EPs/CPs participating AHFT: Re-certificate the OAPI programs;
 - EPs not participating AHFT: Re-compile the OAPI header file, verify and sign a checklist (to be provided by HKEx);
 - CPs not participating AHFT: Re-certificate the OAPI programs and participate in the market rehearsals; and
- c) All CPs including those not participating in the AHFT will be required to comply with the proposed mandatory variation adjustment and margin call following the market open of each regular trading session.

All EPs/CPs should review their trading and back office systems and make modifications to support necessary functions including trading, clearing, risk monitoring and client support. They should discuss with their system and information vendors (if applicable) to ensure system readiness. Sufficient lead time will be provided to ensure smooth implementation.

45. Impact on EPs/CPs that Decided to Provide Limited Services

Should EPs/CPs decide to provide limited services in the T+1 Session, EPs/CPs should ensure that they could access to trade confirmation via terminals such as CLICK/DCASS Terminals, back office workstations and OAPIs. EPs/CPs should ensure that their clients understand the trading arrangements e.g. the order execution and the confirmation. EPs/CPs should observe the SFC's Code of Conduct when dealing with clients on those T+1 Session orders.

46. Impact on EPs/CPs that Decided Not to Participate

Should EPs/CPs decide not to participate and not to accept client's orders during and for the T+1 Session, they should ensure their clients are aware that they would not accept clients' orders during and for the T+1 Session. Notwithstanding the above, as stated in paragraph 44, they would still be required to re-compile the header file for their trading OAPI programs, re-certificate their clearing OAPI programs and to comply with the clearing house's mandatory variation adjustment and margin call following market open of each regular trading session⁷.

⁷ The impact should be manageable since the tolerance limit will be increased from \$1 million of the existing intra-day call arrangement to \$2 million, negating payment demands below that limit on all CPs.

47. Impact on Information Vendors

Information Vendors (IVs) will need to assess the impact of the AHFT on their systems and ensure that they can accommodate the changes in the derivatives market datafeeds without affecting the performance of their services. IVs who would like to cover the AHFT's information will need to enhance their systems according to the revised transmission specification to receive, present and/or re-distribute the data in T Session and T+1 Session properly.

SECTION VI: IMPLEMENTATION

Tentative Schedule for the AHFT

48. Listed below is the AHFT's development and tentative schedule:

| Schedule | HKEEx | EPs / CPs | IVs |
|---------------------|---|---|---|
| Dec 2011 | Announce the Introduction of the AHFT to the market | | |
| Dec 2011 / Jan 2012 | Conduct / attend briefings on An Overview of the AHFT | | |
| Jan 2012 | Distribute Information Paper on the AHFT | EPs/CPs interested in the AHFT, start internal project and resources planning | IVs interested in the AHFT, start internal project and resources planning |
| Q1 2012 | - Distribute OAPI Specifications to EPs/CPs and Transmission Specifications to IVs - Provide HKATS/DCASS OAPI Testing Environment to EPs/CPs | | |
| Q1 to Q2 2012 | - Facilitate EPs/CPs to perform OAPI certification tests - Distribute canned data to IVs to facilitate their testing | Perform OAPI development and testing | Perform software development and testing |
| Q3 2012 | - Distribute CLICK software to EPs - Distribute and deploy DCASS Terminal software to CPs | - Install CLICK software - Support DCASS Terminal software deployment | |
| Q3 2012 | Conduct / attend briefings on Preparation for the AHFT Market Rehearsals | | |
| Q3 2012 | Conduct / participate in the AHFT Market Rehearsals | | |
| To be announced | Launch the AHFT Model | | |

50. Enquiries

For enquiries and further clarification on the AHFT model, please write to:

Hong Kong Exchange and Clearing Limited
12/F One International Finance Centre
1 Harbour View Street
Central
Hong Kong

Re: Information Paper on After-Hours Futures Trading (AHFT)

Alternatively, please contact us by email to ClickSupport@hkex.com.hk; or call our hotlines:

(+852) 2211 6360 (Trading)
(+852) 2979 7222 (Clearing and Risk Management)

A web corner designated for the AHFT is also available via HKEx's website at:
http://www.hkex.com.hk/eng/market/dv_tradinfo/ahft.htm

51. Appendices

The following appendices are attached for EPs', CPs' and IVs' reference and information:

Appendix A – Order Entry and Validity
Appendix B – Price Limit
Appendix C – Error Trade and Price Limit
Appendix D – Examples on Position Recording
Appendix E – Examples on Mandatory Market Open VA and Margin Call

APPENDIX A: ORDER ENTRY AND VALIDITY

| T+1 Box | T Session | T+1 Session | Next Day T Session |
|-------------------------------|-----------|-------------|--------------------|
| [Stock Index Futures] | | | |
| Unchecked – Day Order | Enabled | Cancelled | - |
| Unchecked – GTC Order | Enabled | Inactivated | Activated/Enabled |
| Unchecked – GTD Order | Enabled | Inactivated | Activated/Enabled |
| Checked – Day Order | Enabled | Enabled | Cancelled |
| Checked – GTC Order | Enabled | Enabled | Enabled |
| Checked – GTD Order | Enabled | Enabled | Enabled |
| [Gold Futures] | | | |
| Unchecked/Checked – Day Order | Enabled | Enabled | Cancelled |
| Unchecked/Checked – GTC Order | Enabled | Enabled | Enabled |
| Unchecked/Checked – GTD Order | Enabled | Enabled | Enabled |
| [Other Order Types] | | | |
| Block Trade Orders | Enabled | NOT allowed | - |
| Bulletin Board Orders | Enabled | NOT allowed | - |
| Enter Combination Orders | Enabled | NOT allowed | - |

APPENDIX B: PRICE LIMIT

Price Limit (for T+1 Session only):

HSI Futures & HHI Futures

Buy Order: 105% of T Session Last Traded Price (21,000)

Sell Order: 95% of T Session Last Traded Price (19,000)

[Example]

T Session Last Traded Price
of Spot Month: 20,000

Order Depth [HSIU2]

ID: HSIU2 Qty: 0

| Bid Orders | | | | Ask Orders | | | |
|------------|------|------|-------|------------|------|------|------|
| BTrd | BCmp | BQty | Bid | Ask | AQty | ACmp | ATrd |
| | | 2 | 21000 | 21001 | 2 | | |
| | | 2 | 21000 | 21002 | 2 | | |
| | | 2 | 21000 | 21004 | 2 | | |
| | | 2 | 20998 | 21008 | 2 | | |
| | | 2 | 20995 | | | | |
| | | 2 | 20990 | | | | |

Ranking: 0 Quantity: 0 Average ASK:

Callouts:

- Buyers can** only place orders up to upper limit price
- Sellers can** sell at 21,000 or below
- Buyers cannot** take these orders as they are above upper limit

Price Limit (for T+1 Session only):

HSI Futures & HHI Futures

Buy Order: 105% of T Session Last Traded Price (21,000)

Sell Order: 95% of T Session Last Traded Price (19,000)

[Example]

T Session Last Traded Price
of Spot Month: 20,000

Order Depth [HSIM2]

ID: HSIM2 Qty: 0 Update

| Orders | | Ask Orders | | | |
|--------|-------|------------|------|------|------|
| BQty | Bid | Ask | AQty | ACmp | ATrd |
| 2 | 18998 | 19000 | 2 | | |
| 5 | 18998 | 19000 | 2 | | |
| 2 | 18995 | 19000 | 2 | | |
| 2 | 18995 | 19002 | 2 | | |
| 2 | 18992 | 19003 | 2 | | |
| 2 | 18990 | | | | |

Ranking: 0 Quantity:

Callouts:

- Sellers cannot** take these orders as they are below lower price limit
- Buyers can** buy at 19,000 or above
- Sellers can** only place orders down to lower price limit

APPENDIX C: ERROR TRADE AND PRICE LIMIT

Error Trade & Price Limit

– Combined Consideration (Case 1)

[Example]

T Session Last Traded Price of **Spot Month**: 20,000

Best Bid/Ask Prices in T+1 Session: 20,010/20,012

1) Error Trade Parameter

3% of Notation Price -> 19,411 to 20,611

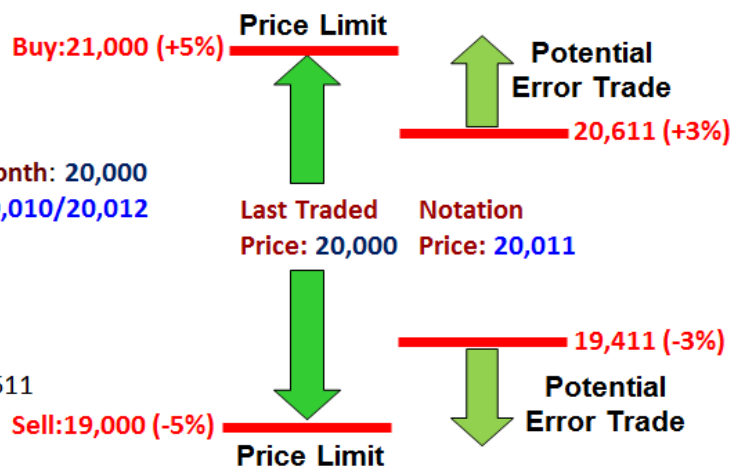
2) Price Limit

Buy Order: 105% of T Session Last Traded Price -> 21,000

Sell Order: 95% of T Session Last Traded Price -> 19,000

Note: Spot Month on Last Trading Day

- Next Month Futures contract will be the reference



Error Trade & Price Limit

– Combined Consideration (Case 2)

[Example]

T Session Last Traded Price of **Spot Month**: 20,000

Best Bid/Ask Prices in T+1 Session: 19,010/19,012

1) Error Trade Parameter

3% of Notation Price -> 18,441 to 19,581

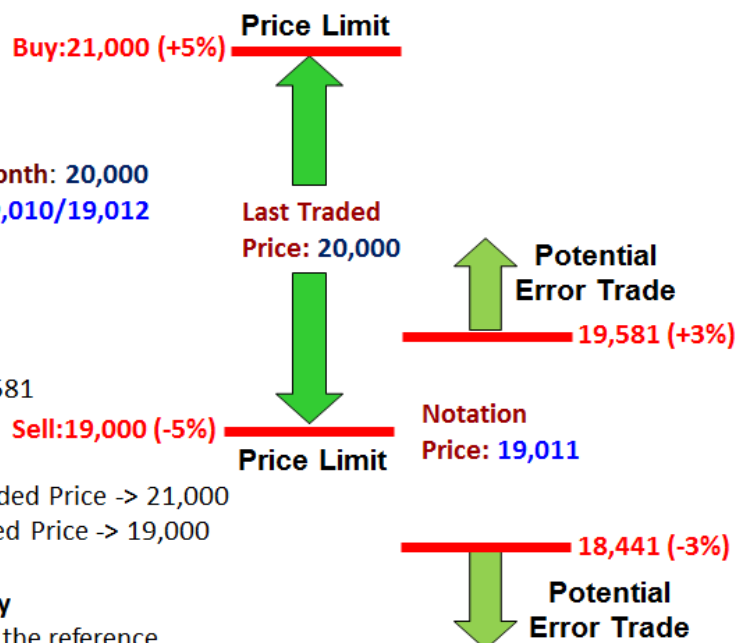
2) Price Limit

Buy Order: 105% of T Session Last Traded Price -> 21,000

Sell Order: 95% of T Session Last Traded Price -> 19,000

Note: Spot Month on Last Trading Day

- Next Month Futures contract will be the reference



APPENDIX D: EXAMPLES ON POSITION RECORDING

| Time | Action / Process | Position | | | | | |
|--------------|---|--------------|-------------|--------------|-------------|--------------|-------------|
| | | O/N Position | | CTD Position | | NTD Position | |
| Day 1 | CTD Session starts (DCASS online available) | | | | | | |
| 07:30 | Start-of-day Position | Long 0 | Short 0 | Long 0 | Short 0 | Long 0 | Short 0 |
| 10:10 | Sell/Close 30 | Long 0 | Short 0 | Long 0 | Short 30 | Long 0 | Short 30 |
| 17:00 | NTD Session starts (overlapping with CTD Session) | | | | | | |
| 17:10 | Take-up/Open 14 (Post-trade of T Trade) | Long 0 | Short 0 | Long 14 | Short 30 | Long 14 | Short 30 |
| 17:40 | Buy/Open 10 | Long 0 | Short 0 | Long 14 | Short 30 | Long 24 | Short 30 |
| 18:45 | CTD Session ends / CTD Batch Process starts (NTD Session continues) | | | | | | |
| Around 21:00 | CTD Position Finalised (NTD Session continues) | | | | | | |
| 22:15 | Long Position Adjustment 6 | Long 0 | Short 0 | Long 14 | Short 30 | Long 18 | Short 24 |
| 22:30 | Sell/Close 7 | Long 0 | Short 0 | Long 14 | Short 30 | Long 11 | Short 24 |
| 23:45 | NTD Session ends (DCASS online closes for the day) | | | | | | |
| Day 2 | CTD Session starts (DCASS online available) for next Business Day | | | | | | |
| 07:30 | Start-of-day Position | Long 14 | Short 30 | Long 11 | Short 24 | Long 11 | Short 24 |

APPENDIX E: EXAMPLES ON MANDATORY MARKET OPEN VA AND MARGIN CALL

| HSI Margin Requirement : \$ 60,000 per contract | | | | | |
|---|-----------------------------|------------------------------|--------------------|--|--|
| | T Session | T+1 Session | | Day-end VA & Margin Call (to be settled at 9:15am) Daily Settlement Price : 18,000 | Mandatory VA & Margin Call (to be settled at 12:00 noon) Calculated Opening Price : 17,800 |
| 1 | Buy 1 HSI contract @ 18,100 | - | Collateral On Hand | \$ 0 | \$ 60,000 |
| | | | Less: VA | \$ 5,000 $[\$50 \times (18,100 - 18,000)]$ | \$ 10,000 $[\$50 \times (18,000 - 17,800)]$ |
| | | | Less: Margin | \$ 60,000 | \$ 60,000 |
| | | | Call Amount | \$ 65,000 | \$ 10,000 < \$ 2M → Not called |
| 2 | - | Buy 1 HSI contract @ 17,900 | Collateral On Hand | \$ 0 | \$ 0 |
| | | | Less: VA | \$ 0 | \$ 5,000 $[\$50 \times (17,900 - 17,800)]$ |
| | | | Less: Margin | \$ 0 | \$ 60,000 |
| | | | Call Amount | \$ 0 | \$ 65,000 < \$ 2M → Not called |
| 3 | Buy 1 HSI contract @ 18,100 | Buy 1 HSI contract @ 17,900 | Collateral On Hand | \$ 0 | \$ 60,000 |
| | | | Less: VA | \$ 5,000 $[\$50 \times (18,100 - 18,000)]$ | \$ 15,000 $[\$50 \times (18,000 - 17,800)] + [\$50 \times (17,900 - 17,800)]$ |
| | | | Less: Margin | \$ 60,000 | \$ 120,000 $[\$60,000 \times 2]$ |
| | | | Call Amount | \$ 65,000 | \$ 75,000 < \$ 2M → Not called |
| 4 | - | Sell 1 HSI contract @ 17,900 | Collateral On Hand | \$ 0 | \$ 0 |
| | | | Less: VA | \$ 0 | - \$ 5,000 $[\$50 \times (17,800 - 17,900)]$ |
| | | | Less: Margin | \$ 0 | \$ 60,000 |
| | | | Call Amount | \$ 0 | \$ 55,000 < \$ 2M → Not called |
| 5 | Buy 1 HSI contract @ 18,100 | Sell 1 HSI contract @ 17,900 | Collateral On Hand | \$ 0 | \$ 60,000 |
| | | | Less: VA | \$ 5,000 $[\$50 \times (18,100 - 18,000)]$ | \$ 5,000 $[\$50 \times (18,000 - 17,800)] + [\$50 \times (17,800 - 17,900)]$ |
| | | | Less: Margin | \$ 60,000 | \$ 0 * |
| | | | Call Amount | \$ 65,000 | - \$ 55,000 Available for withdrawal |

* Assume CP closes the HSI position by 8:45a.m.

