Operational Trading Procedures for Options Trading Exchange Participants

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Chapter 3: Trading Functionalities

3.10A Order Amendment and Cancellation

An order in a stock options contract entered into the Central Orderbook on behalf of a client or an Options Exchange Participant and designated a particular order number may be amended or cancelled provided that the amendment or cancellation is made in compliance with the instructions of that client or Options Exchange Participant, as the case may be, in respect of that particular order.

Options Trading Exchange Participants may amend, cancel or inactivate orders resident in the Central Orderbook ("Valid Orders") only during trading hours and the pre-trading period of 30 minutes before the opening of each trading session.

A Valid Order that is amended in connection with a reduction in size, a change in the duration of validity, or modification of optional "free" text information shall not affect the time priority of the original Valid Order.

A Valid Order that is amended in connection with price or an increase in size: (i) will result in the loss of time priority of the original Valid Order if the amendment is made during trading hours; and (ii) will be immediately converted into an inactive order if the amendment is made during the 30-minute pre-trading period.

In emergency situations where an Options Trading Exchange Participant loses connection to HKATS and wishes to delete any of its orders in the order book, it can request the Exchange to delete such orders on its behalf (See Chapter 7), subject to a charge (See Appendix A).

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Chapter 7: Contingency Procedures

7.1 [Repealed] Servicing

Options Exchange Participants requiring assistance relating to options trading and clearing may seek assistance from the Exchange

Enquiries on options trading issues should be made to
Tel. 2840 3580 or 2211 6360 (9:00 a.m. 6:00 p.m. on every trade day)
Fax 2815 7616

Enquiries on options technical issues should be made to
Tel. 2211 6360 (HKATS) (9:00 a.m. 6:00 p.m. on every trade day)
Fax 2815 7616

7.1A [Repealed] Signals of HKATS Malfunction

HKATS possesses intelligence to monitor the connection between the central system and an Options Trading Exchange Participant's individual workstation(s). Options Trading Exchange Participants can verify if there is any interruption due to network connection and/or equipment failure by opening the Information Feed Status Window and Market Messages Window.

The following is a list of possible symptoms of the Information Feed Status and Market Messages Windows when the system is unstable:

Change of Status in the Information Feed Status Window

- Information Feed Status changed to "OFF".
- Information Feed Status changed to BLANK.

Pop up of Warning Messages from Market Messages Window

- Invalid operation before login. Not connected to OMNetAPI.
- Warning! You are currently NOT receiving any updated price-information. Please note that your orders still are active and can be traded.
- OMNet network status: Potential network problem discovered. You MAY have lost Price-Information.
- OMNet network status: Potential network problem discovered. You MAY have lost Deal-Information. Please update your orderbook and verify trades in the Clearing System.

Options Trading Exchange Participants are required to report to the HKATS hotline at 2211-6360 immediately if any one of the above mentioned symptoms appears.

7.1B System Failure

The Exchange has installed a parallel set of production and back up computer facilities, either of which can support the operation of HKATS.

In the event of a disaster or other event affecting the production facilities which results in the failure in whole or in part of HKATS and system recovery fails, the Exchange may temporarily suspend trading on HKATS until failover of the system to the backup facilities has been completed and the operation of HKATS can be resumed. Options Trading Exchange Participants should refer to the HKATS User's Guide for further particulars and procedures regarding system malfunction or failure.

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7.1C Equipment Failure

In case of a failure, error or defect in any of the equipment relating to the trading of an Options Trading Exchange Participant on HKATS (including but not limited to terminals, network equipment and communication lines), whether installed at the Options Trading Exchange Participant's office premises or any other location, the Options Trading Exchange Participant shall report the incident to the HKATS hotline immediately. Options Trading Exchange Participants are requested to follow the procedures stipulated in the HKATS User's Guide regarding equipment failure.

An Options Trading Exchange Participant can apply to the Exchange to rent an HKATS terminal at its SOS Centre temporarily in case of lost connectivity. The Exchange has the absolute discretion to determine whether or not to approve such application and allow the Options Trading Exchange Participant to use any such HKATS terminal.

An Options Trading Exchange Participant experiencing a temporary loss of connectivity to HKATS may also request the Exchange to delete orders from or conduct other processes on HKATS on its behalf ("On-Behalf-Of Processing"). On-Behalf-Of Processing is principally intended for real contingency situations to reduce the financial risk of an Options Trading Exchange Participant when there is an unexpected temporary failure in system access. It is not intended to be a long-term alternative for the Options Trading Exchange Participant. The Options Trading Exchange Participant is expected to restore its access to HKATS in the shortest time practicable. On-Behalf-Of Processing is subject to the availability of the resources of the Exchange at the time of an Options Trading Exchange Participant's request. The Exchange will appraise each request for On-Behalf-Of Processing on a case-by-case basis and shall have the absolute discretion to turn down any request which it deems inappropriate. The Exchange shall not be liable to any Options Trading Exchange Participant for any On-Behalf-Of Processing conducted on its behalf.

A fee shall be payable by an Options Trading Exchange Participant for renting an SOS HKATS terminal and for any On-Behalf-Of Processing executed by the Exchange on its behalf.

7.2 [Repealed] Exchange Back-Up Facility

An Options Trading Exchange Participant can apply to the Exchange to rent an HKATS terminal temporarily in case of lost connectivity, on a first come first served basis and subject to availability. A charge will be levied for this service (see Appendix A).

The process works as follows:

1. When an Options Trading Exchange Participant loses connectivity to HKATS, the Options Trading Exchange Participant should fax a completed Form OP302 (Request for Rental of CLICK Workstation in SOS Centre) to the Exchange requesting to rent from the Exchange a backup terminal in the SOS Centre.

Please refer to the HKATS User's Guide for the location of the SOS Centre.

- 2. The Exchange will call back the Options Trading Exchange Participant to confirm whether a spare terminal is available. The Exchange will ask for personal particulars of the representatives (at most two per terminal) who will come to the SOS Centre. Only
- Responsible Officers and Authorized Persons will be allowed entry to the SOS Centre.
- 3. The representatives of the Options Trading Exchange Participant should bring along the original Form OP302 and their own Hong Kong ID cards or passports to the SOS Centre and check in. They can then start using the backup terminals with their respective HKATS Usernames and passwords.
- 4. No back office functionalities will be provided in the SOS Centre.
- 5. The Exchange will subsequently investigate the reported system disconnection.

7.3 [Repealed] On-Behalf-Of Processing

- 1. An Options Trading Exchange Participant temporarily losing connectivity to HKATS can choose to fax in or hand deliver eligible OBO transactions via Form OP301 requesting the Exchange to delete orders from HKATS on its behalf.
- 2. After receipt of Form OP301, the Exchange will call back the Options Trading Exchange Participant to confirm the OBO transaction. The Exchange may ask some questions, aiming to avoid obvious fraudulent requests.
- 3. In the case of proven system inaccessibility of a Market Maker, the quoting obligations will be temporarily suspended for the period of inaccessibility and so quote entry is not an eligible OBO transaction.
- 4. Fax instructions will be accepted by the Exchange only if the requesting Options Trading Exchange Participant has signed and maintained with the Exchange an effective Fax Indemnity in the form set forth in Appendix F to these Operational Trading Procedures.

5. [Repealed]

- 6. Services of On Behalf Of processing provided by the Exchange to Options Trading Exchange Participants are subject to the availability of resources at the time of the requests and on a best effort basis. On Behalf Of processing is principally designed for real contingency situations to reduce the financial risk of an Options Trading Exchange Participant when there is an unexpected temporary failure in system access. It is not intended to be a long term alternative form for an Options Trading Exchange Participant to continue options trading business without endeavouring to restore system access in the shortest time. Under this principle, the Exchange will on a case by case basis appraise the need of every On Behalf Of processing request and have the sole absolute discretion to turn down any such request which the Exchange deems inappropriate.
- 7. A charge will be payable by the Options Trading Exchange Participant for executing On Behalf Of processing (see Appendix A).

8. Eligible OBO transactions include:

Deletion
Deletion
Deletion

Notes:

- 1. No On-Behalf-Of processing will be performed on the Open/Close field.
- A request for On-Behalf-Of processing relating to order deletions involving more than 20 orders will be treated as a request for bulk deletion.

7.4 [Repealed] Inter-Exchange Participant Back-Up Facilities

Options Trading Exchange Participants can have agreement to back up one another in case of lost connectivity with HKATS on client business. If Options Trading Exchange Participants P and Q share the same client, and when this client requests P to input an options order while P lost temporarily access to HKATS, P can request Q to input the order and, when the order is matched, give up the trade back to P via DCASS.

7.5 [Repealed] Failure of Options Trading Exchange Participant's Site

In the event of Options Trading Exchange Participant's site failure, Options Trading Exchange Participants must contact the HKATS hotline at 2211-6360 and advise the Exchange if it would like to

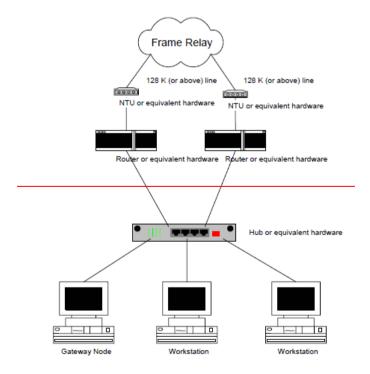
cancel all outstanding orders immediately or keep them activated. Any Options Trading Exchange Participant which fails to provide instruction to the Exchange within 10 minutes after the interruption of HKATS will have its orders inactivated automatically.

7.5A [Repealed] Technical Alternative for the Recovery of an Options Trading Exchange Participant's Site Failure

From a technical aspect, HKATS is capable of resuming trading activities for any single point of failure.

Detailed information is set forth in the following table and network diagram:

Network / Equipment	Backup / Recovery					
128K (or above) Frame	Dual Connection with Automatic failover					
Relay	Recovered by Network Provider					
NTU or equivalent	Automatic failover					
hardware	On-site repair by Network Provider					
Router or equivalent	Automatic failover					
hardware	On-site repair by Network Provider					
Hub or equivalent hardware	Options Trading Exchange Participants can connect					
	HKATS workstations directly to router by a coaxial					
	cable					
	On-site repair by Network Provider					
Network Gateway	Options Trading Exchange Participants can connect to					
	the Central Gateway. However, the gateway node and					
	port number must be configured and assigned by the					
	Exchange					
	Please refer to Appendix M for details					
	On-site repair by Network Provider					
HKATS workstation	It is the Options Trading Exchange Participant's own					
	decision whether or not to install additional HKATS					
	workstations to act as backup terminals					



7.6 [Repealed] Failure of Central System

7.6.1 Failure which can be recovered immediately by failover mechanism

HKATS is expected to automatically recover from the machine/process/subsystem crash or network component failure by a sophisticated failover mechanism. Depending on the nature of system failure, Options Trading Exchange Participants may encounter different levels of interruption of 5 seconds to

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3 minutes under normal circumstances.

The Exchange will notify all Options Trading Exchange Participants immediately once the failover process is completed. Options Trading Exchange Participants should conduct the following list of procedures to rectify the information of their HKATS workstations:

- verify if the status of Information Feed Status changes to "ON"
- examine if there is a pop up message of "You are now normally receiving the updated price information. Please verify this by checking your information feed status window."
- reconcile the details of the Orderbook by applying the "Update Orderbook" function
- download the latest trade information from the Exchange by applying the "Update Clearing Trades" function and examine the details in the Clearing Trades Window
- reload the latest price information from the central marketplace by applying the "Update Price Information" function

As the information of Order History, Company Trades and Tickers Windows cannot be reloaded from the central marketplace, there may be some discrepancies amongst these windows.

7.6.1.1 If a trade is being executed during the period of automatic recovery (failover) of the marketplace server, HKATS may record the trade information twice in the Company Trades and the Clearing Trades Windows. Hence, Options Trading Exchange Participants are required to clarify immediately with the HKATS hotline at 2211-6360 prior to confirming any order execution to their clients if any one of the following scenarios occurs:

1. Warning message of "ATTENTION! You might have received a duplicate trade. Sequenceno-XXXXXX!" pops up.



Comp									Attention	
HKGCM	RCIM9	900009	1	98	C		12:20	G01		Hor Clearing Trades window.

Options Trading Exchange Participants may refer to Appendix L Operating Flowchart for the Validation of Trade Details.

Important: Options Trading Exchange Participants employing API must build in program logic to handle this situation in their API module.

7.6.1.2 If an order is being input during the period of automatic recovery (node/site failover), HKATS may capture the relevant order twice in the Central Orderbook. Hence, Options Trading Exchange Participants are required to strictly follow the verification procedures as referred to in Appendix L on the Operating Flowchart for the Validation of Possible Duplicate/Excess Order (Node and/or Site Failover).

7.6.2 Failure which cannot be recovered by failover mechanism

In the event that the system failure cannot be recovered immediately, the Exchange may temporarily suspend trading activities until the system is capable of providing satisfactory service to all Options Trading Exchange Participants. Options Trading Exchange Participants are requested to perform the following procedures:

- verify that the status of the Information Feed Status window is "ON" after recovery
- open the Market Messages Window for broadcast of the opening schedule of the stock options market and pay special attention to the Exchange's announcement(s)
- verify their orders and trades
- cancel, amend or inactivate their orders or enter inactive orders in the system before market open.

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APPENDIX L: [Repealed] OPERATING FLOWCHART FOR THE VALIDATION OF TRADE/ORDER

OPERATING FLOWCHART FOR THE VALIDATION OF TRADE DETAILS

POSSIBLE DUPLICATE DEALS IN COMPANY TRADES & CLEARING TRADES WINDOWS

 If a trade is being executed during the period of automatic recovery (failover) of marketplace server, HKATS may record the trade information twice in Company Trades and Clearing Trades windows. As such, Options Trading Exchange Participants are required to strictly follow the trade verification procedures set forth below for every trade transaction to avoid any duplicate deals.

VERIFY THE DETAILS OF CLEARING TRADES WINDOW

- In order to spot any potential duplicate trade, all HKATS users are required to open the Clearing Trades window throughout the whole trading session of each business day.
- Whenever a warning message of "ATTENTION! You may have received a duplicate trade. Sequence no =!" pops up and/or an entry marked with "DUP" appears in the Attention column of Clearing Trades window, HKATS Users should clarify immediately with the Exchange by hotline (Tel: 2211 6360) prior to confirming any order execution to their clients.

REPORT DETAILS OF TRADE INFORMATION TO THE EXCHANGE

- In order to speed up the verification process of duplicate trade(s), Options Trading Exchange Participants are required to provide the following information to the Exchange over the phone:
- a) Execution Time;

at Clearing Trades window

- b) Instrument Id:
- c) Bought / Sold;
- d) Price and Quantity;

VALIDATION OF THE DUPLICATED TRADE INFORMATION

 The Exchange Officials validate the trade details and confirm with Options Trading Exchange Participants whether it is a duplicated trade.

CONFIRMATION OF TRADE DETAILS WITH CLIENTS

After confirmation with the Exchange Officials, Options Trading Exchange
 Participants shall report the trade details to their clients accordingly.

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OPERATING FLOWCHART FOR THE VALIDATION OF POSSIBLE DUPLICATE / EXCESS ORDER (NODE AND/OR SITE FAILOVER)

POSSIBILITY OF CAPTURING DUPLICATE / EXCESS ORDERS

• If an order is being input during the period of automatic recovery (node / site failover), HKATS may capture the relevant order twice in the central orderbook. Hence, Options Trading Exchange Participants are required to strictly follow the verification procedures set forth below for the validation of orders and trades after node / site failover.

NODE / SITE FAILOVER

Whenever there is an occurrence of node / site failover, the Exchange will
notify all Options Trading Exchange Participants through Market Messages
window, by phone, email or facsimile.

UPDATING INFORMATION OF ORDERBOOK & CLEARING TRADES WINDOWS

- Once the failover is completed, the Exchange will immediately notify all Options
 Trading Exchange Participants via Market Messages window, by phone, email
 or facsimile. Options Trading Exchange Participants should reconcile order and
 trade information of HKATS workstation(s) together with central system by
 applying the following functionalities:
- a) Update Order Book
- b) Update Clearing Trades

VALIDATION OF POSSIBLE DUPLICATED ORDER AND / OR TRADE TRANSACTION

 Upon the completion of reconciliation processes, Options Trading Exchange Participants shall verify the details of order(s), which is / are being input into the HKATS system at 3 minutes before / after the period of failover, in both Orderbook and Clearing Trades windows so as to spot the existence of excess order / trade.

CONFIRMATION WITH THE EXCHANGE

 Options Trading Exchange Participants shall clarify with the Exchange immediately by calling the hotline at 2211 6360 for any suspicion of excess order / trade.

EXCESS ORDER

 Exchange officials will cancel the excess order immediately by using NT Cibios and confirm the details with Exchange Participant immediately over the phone.

EXCESS TRADE

 After confirming the facts, Exchange officials will cancel the relevant transaction(s) and confirm with the involved parties immediately by phone and subsequently by facsimile.

APPENDIX M: [Repealed]

CHANGING CONNECTION FROM NETWORK GATEWAY TO CENTRAL GATEWAY

Step 1) Carry out normal login

Step 2) Click the ">>" button to extend the login window

CLICK Trade - 3.0-5.1	
Username: ABC88001	Logon
Password:	<u>E</u> xit
<u> </u>	
✓ Login to marketplace Connect to CLICK ✓ Restore window positions from last session	sen /er >>

Step 3) Use Mouse to click the Socket # and gateway field (Other fields remain unchanged)

CLICK Trade - 3.0-5.1						
Username: ABC88001	Logon					
Password:	<u>E</u> xit					
Client parameters Server parameters						
Gateway: ABCCGA1	Socket #: 8000 Gateway: ABCWA1					

Step 4) Enter the Socket # and Gateway # name supplied by the Exchange hotline

Step 5) Try to login to HKATS again