Operational Clearing Procedures for Options Trading Exchange Participants

# IV. DUTIES AND OBLIGATIONS OF SEOCH PARTICIPANTS

## 8. SETTLEMENT AND DELIVERY IN RESPECT OF STOCK TRANSACTIONS

## 8.10.2 Settlement of Fractional Shares

The normal procedures for settlement on exercise will not apply to fractional shares, since CCASS is only able to settle whole shares. Fractional shares of each adjusted options contract exercised will be settled in cash. i.e. SEOCH will assume the buying SEOCH Participant (which exercised a call or assigned a put) has disposed of the fractional shares whilst the delivering SEOCH Participant (which exercised a call) has purchased the fractional shares at the fixing price as determined by SEOCH. Under normal circumstances, the fixing price will be the market closing price of the underlying stock in the cash market on the day of exercise. The cash settlement amount will be recorded in the CCMS Collateral Account of the relevant SEOCH Participant on the day of exercise.

The cash settlement amount is calculated on the exercise day by multiplying the share fraction by the difference between the strike price and the fixing price of the underlying stock as determined by SEOCH. Under normal circumstances, the fixing price will be the market closing price of the underlying stock in the cash market on that day.

For example, the contract size for XYZ call option at a strike of HK\$110.50 is 533.33 shares after capital adjustment. If 5 contracts are being exercised on a day when the underlying market closes at HK\$120.50, the settlement amount for the fractional shares will be computed as follows:

Cash Amount for fractional shares:

0.33 \* 5 \* (HK\$110.50-HK\$120.50) = -HK\$16.50

The above cash amount will be credited to the buying SEOCH Participant's CCMS Collateral Account and debited to the delivering SEOCH Participant's CCMS Collateral Account i.e. the buying SEOCH Participant will receive and the delivering SEOCH Participant will pay HK\$16.50.

# 9. MARGIN REQUIREMENT

## 9.3 Margin Treatment of SEOCH Participant Positions

## 9.3.1 Margin Treatment of Open Options Positions

## **9.3.1.1** House Positions

For open option positions maintained in any account in DCASS which is margined on a net basis, the netting works as follows:

i. A long position in an options series will be netted against a short position in the same option series to create a net long or net short position for margining.

- ii. A margin credit from a net long position can offset a margin debit in all other series in the same option class.
- iii. If the result, after margining for a whole option class, is a margin credit, this can be used to offset the margin requirement of open options positions in a different option class with the same Currency of the Contract.

# **10. MONEY SETTLEMENT**

## 10.1 Introduction

Every SEOCH Participant must maintain bank account(s) for Hong Kong dollars and each applicable non-Hong Kong dollar Settlement Currency with one of the Designated Banks or Settlement Banks for money settlement purpose. For the avoidance of doubt, a SEOCH Participant which has not opened bank account(s) in the Settlement Currency of a Contract (and Hong Kong dollars if the Settlement Currency is not Hong Kong dollars) as aforesaid will not be allowed to record, register and clear that Contract. As money settlement transactions recorded in the House and Client CCMS Collateral Accounts are processed separately, every SEOCH Participant must maintain at least two bank accounts in Hong Kong dollars and each applicable non-Hong Kong dollar Settlement Currency with a Designated Bank or a Settlement Bank (as the case may be) and properly identify which of these accounts is for the handling of money settlement transactions recorded in the House Transactions recorded in the House records for the settlement transactions recorded in the House CCMS Collateral Account and which of these is for the handling of money settlement transactions recorded in the Client CCMS Collateral Account.

## **11. Reserve Fund**

# **11.3** Methods of Contribution

The Initial Contribution to the Reserve Fund can only be made in cash.

The Variable Contribution to the Reserve Fund can be made in cash or in an approved form of non-cash collateral.

Demands for contributions to the Reserve Fund, whether as a result of an increase in Initial Contribution or Variable Contribution, or reimbursement as a result of excess amount in the Reserve Fund after Top-up Calculation, will be advised individually and confidentially to each SEOCH Participant by the issuance of a **Reserve Fund Contribution Notice** [Appendix C3].

Fig. 1: An Example of the Top-Up Process	
Prior to the Top-up calculation	
Current Size of Aggregate Initial Contribution: Current Size of Aggregate Variable Contribution:	HK\$150 million HK\$50 million
Aggregate Reserve Fund Size:	HK\$200 million
Total Number of SEOCH Participants:	100

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#### After top-up calculation

The top-up calculation concludes that the Aggregate Reserve Fund size should be increased to HK\$220 million. There is no change to the Aggregate Initial Contribution. Therefore the new construction of the Reserve Fund should be as follows:

Aggregate Reserve Fund Requirement: Less: Size of Aggregate Initial Contribution:	HK\$220 million HK\$150 million
New Aggregate Variable Contribution Requirement:	HK\$70 million
Total Number of SEOCH Participants:	100

This HK\$70 million will be shared among the 100 SEOCH Participants pro-rata on the basis of each SEOCH Participant's share of the average Total Margin Requirement and Net Premium Paid over the last 20 trading days.

If SEOCH Participant A's share of the newly calculated Variable Contribution Requirement is HK\$3 million and its current Variable Contribution is HK\$2.5 million, the top-up payment will be:

HK\$3 million minus HK\$2.5 million = HK\$500,000

If SEOCH Participant B's share of the newly calculated Variable Contribution Requirement is HK\$1.8 million and its current Variable Contribution is HK\$2 million, SEOCH will reimburse the excess as follows :

HK\$2 million minus HK\$1.8 million = HK\$200,000

## 11.6 Limits on Individual SEOCH Participant Contributions to the Reserve Fund

There shall be no limit to the Reserve Fund Requirement to be demanded from a SEOCH Participant. However a SEOCH Participant could limit its total exposure to the Reserve Fund by resigning as a SEOCH Participant.

If SEOCH requires a SEOCH Participant to provide additional contribution either due to increase in the Variable Contribution required or replenishment of the Reserve Fund as a result of SEOCH Participants' default, a SEOCH Participant could limit its total contribution to the Reserve Fund provided that, immediately after receiving the demand for additional contribution, it notifies SEOCH in writing that it intends to resign.

If the SEOCH Participant submits notice of resignation as mentioned above, its maximum exposure to the Reserve Fund will be equal to three times its existing aggregate contribution requirement to the Reserve Fund prior to the new additional contribution request being issued. For example, if a resigning SEOCH Participant's current aggregate contribution to the Reserve Fund (i.e. its Initial plus Variable Contribution) is HK\$2,000,000, the most that it is obliged to contribute in total would be HK\$6,000,000. In other words, it is only obliged to contribute a further amount of HK\$4,000,000 in addition to its existing contribution of HK\$2,000,000.

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This maximum exposure excludes any trading losses incurred by that SEOCH Participant; it will continue to be fully liable for these, regardless of its resignation.

When the resignation is approved by the SEOCH Board, its Reserve Fund contribution will be returned in accordance with Clearing Rule 722 (provided that a claim has not been made on it in the interim period). From the time of giving notice, the SEOCH Participant must only enter into closing transactions.

If, after giving notice of its resignation, a SEOCH Participant changes its mind and wishes to remain a SEOCH Participant, it will be required to contribute the full amount of any outstanding additional contribution requested before the resignation can be revoked. But as with all requests to become a SEOCH Participant, the revocation of resignation would be subject to the approval of the SEOCH Board.

#### 13. FEES, TRANSACTION LEVY AND STAMP DUTY

#### **13.2** Tariff and Clearing Fees

#### **13.2.1** Cabinet Trades

Trades matched at a premium of one minimum price fluctuation will be treated as cabinet trades and will attract no Exchange trading tariff at all. Such transactions are sometimes useful as a means of eliminating far out-of-the money positions that are unlikely ever to have any value but which continue to create margin obligations. Closing such positions may also assist in complying with position limits.

## APPENDIX D. PORTFOLIO RISK MARGINING SYSTEM OF HKEX (PRiME)

### Step 8: Margin Requirement of each account for each option class

For a net margined account, any margin credit from the Margin Requirement for this option class may be used to offset the Margin Requirements for the other option classes with the same Currency of the Contract within the same account.

## **EXAMPLE OF PRIME MARGINING**

## A) Marginable Positions. The objective is to identify what is to be margined.

Contract	Underlying Closing (HK\$)	Account	Long	Short	Marginable Position
HKZ DEC 95 C	100.00	Omnibus Client Individual Client 001 Client Offset Claim House	0 5 0 0	20 0 30 5	20S 5L 30S 5S
HKZ JAN 100 P	100.00	Omnibus Client Client Offset Claim House	10 0 10	50 30 50	50S 30S 40S

L : Long; S : Short

Note that the 10 long HKZ JAN 100 puts in the Omnibus Client Account are not netted against the 50 short positions. This is what is meant by "gross" margining. If the 10 long positions were to be netted, it would mean that the client(s) holding the long positions were partly covering the risk of the client(s) with short positions.

#### B) Mark-to-Market Margin. This calculates liquidation value at current market levels.

The process is clearer if we re-order the positions by account type.

Contract	Contract Size	Mark to Market Price	Marginable Position	Mark-to-Market Margin (HK\$) <sup>a</sup>
Omnibus Client Positions:				0
HKZ DEC 95 C	400	6.00	208	48,000
HKZ JAN 100 P	400	4.00	50S	80,000
				128,000
Client Offset Claim Positions:				
HKZ DEC 95 C	400	6.00	30S	72,000
HKZ JAN 100 P	400	4.00	30S	48,000
				120,000

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Individual Client 001 Positions:				
HKZ DEC 95 C	400	6.00	5L	-12,000
				-12,000
House Positions:				
HKZ DEC 95 C	400	6.00	5S	12,000
HKZ JAN 100 P	400	4.00	40S	64,000
				76,000

(a) Mark-to-Market Margin for an option series = option market value \* no. of contracts held \* contract size.

#### I) Calculate the amount to be collected

Suppose the collateral held is HK\$100,000 in cash for each of the Client and House CCMS Collateral Accounts. In this case, the margin calls (i.e. the amount to be collected) are:

Client CCMS Collateral Account :

Total Margin Requirement settled through the Client CCMS Collateral Account minus collateral held = 403,150 - 100,000

= 303,150

House CCMS Collateral Account :

Total Margin Requirement settled through the House CCMS Collateral Account minus collateral held = 147,525 - 100,000

= 47,525

This example is deliberately simplified by showing only one option class. If there is more than one option class the process is repeated for each option class in accordance with the steps described earlier.

#### APPENDIX E. MINIMUM RESERVE FUND CONTRIBUTIONS OF SEOCH PARTICIPANTS

The Initial Reserve Fund Contribution for different categories of SEOCH Participants are as follows:

- i. HK\$5,000,000 for a General Clearing Participant plus an additional HK\$1,500,000 for each clearing arrangement beyond the first three
- ii. HK\$1,500,000 for a Direct Clearing Participant.

SEOCH may vary the amount of initial contribution generally or in respect of any particular SEOCH Participant having regard to, amongst other things, any restrictions applying to that SEOCH Participant's Exchange Traded Options Business or conditions applying to its Participantship.

# APPENDIX G. FEES AND COSTS

### Fees and Costs Payable to SEOCH

(Unless otherwise specified, the amounts listed in this appendix are in Hong Kong dollars)

#### G1 [Repealed]

## **G2** Clearing Expenses

Fee Type	Fee
Exercise fee – HK\$ denominated stock options	\$2.00/contract
Exercise fee – RMB denominated stock options	RMB2.00/contract

## APPENDIX H. LIST OF APPROVED CURRENCIES

# List of approved currencies that may be used to satisfy margin requirements

- 1. Hong Kong Dollars
- 2. US Dollars
- 3. Euro
- 4. Japanese Yen
- 5. Renminbi