

## **11. RESERVE FUND**

### **11.1 Use of the Reserve Fund**

The Reserve Fund exists to support SEOCH's obligations as counterparty to each option contract. If the liquidation value of a Defaulter's outstanding option position, together with its collateral, are insufficient to meet that SEOCH Participant's obligations<sup>1</sup>, the Reserve Fund may be used to meet SEOCH's outstanding liabilities.

SEOCH may apply any amounts standing to the credit of the Reserve Fund as a short-term source of liquid funds to meet any immediate obligations in respect of SEOCH's liabilities which arise under OCH Contracts cleared by it, regardless of the order of priority set out in Clearing Rule 413.

The Reserve Fund is financed primarily from the SEOCH Participants' own resources in the form of Initial Contributions and Variable Contributions, and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund, but insurance and other coverage may also be used from time to time. The size of the Reserve Fund is made up of the basic elements (including Initial Contributions, interest income, any guarantee, facility and insurance policy), the resources which may be appropriated by SEOCH as contributions to the Reserve Fund and Variable Contributions.

### **11.2 SEOCH Participants' Reserve Fund Contributions**

All the Reserve Fund Contributions of a SEOCH Participant, including its Initial and Variable Contributions, will be credited to its House CCMS Collateral Account and assigned for Reserve Fund purpose. A SEOCH Participant can enquire about its Reserve Fund Contributions via the report COLLATERAL BALANCE generated by CCMS.

#### **11.2.1 Initial Contributions**

The Initial Contribution that each SEOCH Participant must make is determined by the SEOCH Board. See Appendix E for details.

#### **11.2.2 Variable Contributions and Resources which may be Appropriated by SEOCH as Contributions to the Reserve Fund**

In addition to making the Initial Contributions under 11.2.1, SEOCH may demand Variable Contributions from SEOCH Participants through a "Top-up" process such that the existing size of the Reserve Fund after making the Top-up payment will cover all the risk exposures of the Reserve Fund throughout the most recent 60 Business Days. It is designed to ensure that the existing size of the Reserve Fund, which shall be the sum of the basic elements of the Reserve Fund, the resources which may be appropriated by SEOCH as contributions to the Reserve Fund and the Variable Contributions, remains in proportion with the size and volatility of the market.

Subject to Clearing Rule 413F, the first Business Day of every month will be the Top-up calculation date and it is on this day that the re-calculation of the Variable Contributions is carried out. The process works as follows:

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<sup>1</sup> Note that the Fidelity Fund is not applicable for options. The Rules of the Exchange currently state that no compensation is payable under the Fidelity Fund in respect of stock borrowing and lending arrangements or for trades settled under the CNS System. Similarly, there will be no such compensation payable for option trades or delivery of underlying stocks arising from exercise.

On the Top-up calculation date, SEOCH calculates the daily risk exposure of the Reserve Fund on each Business Day, which is the greater of the upside or downside risk exposure of the Reserve Fund on that day, and Variable Contributions and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund will be recalculated (and in the case of Variable Contributions demanded) such that the size of the Reserve Fund after the injection of the Variable Contributions and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund will cover 115% of the risk exposures of the Reserve Fund throughout the most recent 60 Business Days. If the size of Reserve Fund determined above is higher than the Reserve Fund Threshold, it shall be reduced to an amount equal to the Reserve Fund Threshold.

SEOCH will determine the resources which may be appropriated by SEOCH as contributions to the Reserve Fund using the following formulae:

If 115% of MEX is higher than the Reserve Fund Threshold:

CHA = 10% of the Reserve Fund Threshold

If 115% of MEX is higher than or equal to MIN but lower than the Reserve Fund Threshold:

CHA = 10% x (MEX x 115%)

If 115% of MEX is lower than MIN:

CHA = 10% x (BEF ÷ 90%)

where

MEX	=	the maximum daily risk exposure of the Reserve Fund during the most recent 60 Business Days
BEF	=	the basic elements of the Reserve Fund (including Initial Contributions, interest income, any guarantee, facility and insurance policy)
CHA	=	the resources which may be appropriated by SEOCH as contributions to the Reserve Fund, which should amount to 10% or such other percentage of the Reserve Fund size as determined by SEOCH from time to time, in which case the percentage in the formulae above shall be adjusted accordingly.
MIN	=	the minimum size of the Reserve Fund (i.e. the sum of BEF and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund), which should amount to BEF ÷ 90%

SEOCH will deduct the basic elements of the Reserve Fund and the total resources which may be appropriated by SEOCH as contributions to the Reserve Fund from the Reserve Fund size to arrive at the Variable Contributions.

The share of the Variable Contributions that each SEOCH Participant must contribute will be calculated. Each SEOCH Participant's share of the Variable Contributions will be equal to that SEOCH Participant's share of the average **total margin requirement** and **net premium paid** over the most recent 60 Business Days. For the purpose of calculating the Variable Contribution of each SEOCH Participant, the total margin requirement and net premium of all Contracts will be measured in Hong Kong dollars or its non-Hong Kong dollar currency equivalent based on the exchange rate determined by SEOCH for each type of Settlement Currency. Any SEOCH Participant that is declared as a Defaulter preceding the Top-up calculation date will be excluded from the calculation.

For each SEOCH Participant, SEOCH will compare the share of the Variable Contributions required with the actual share currently provided, and determine the amount, if any, by which the SEOCH Participant's share should be increased. This amount will be the SEOCH Participant's Top-up payment to the Variable Contributions. For the avoidance of doubt, the size of the actual Variable Contribution of each SEOCH Participant shall take into account any Variable Contribution applied in accordance with the Clearing Rules preceding the Top-up calculation date.

The SEOCH Participant will be required to pay on demand the difference if the size of the actual Variable Contribution currently in place is lower than the required level. The Top-up payment which maintains the SEOCH Participant's share of the Variable Contributions (other than any Assessment or Voluntary Recap Amount) may be in cash or in such other form of non-cash collateral as approved by SEOCH from time to time. If the size of the actual Variable Contribution currently in place exceeds the new required level, Variable Contribution will be reduced and the excess refunded.

### 11.2.3 Maintenance of the Reserve Fund

The Reserve Fund will be of a minimum size as determined by SEOCH, regardless of the number of SEOCH Participants.

Subject to Clearing Rule 413F, ad hoc recalculation of the Variable Contributions, and associated demands for payment, may be made from time to time separate from the regular monthly calculations, if:

- (a) the daily risk exposure of the Reserve Fund calculated on each Business Day exceeds 90% of; and
- (b) Reserve Fund Threshold is higher than

the existing Reserve Fund size or if SEOCH considers it appropriate to do so in any other circumstances. If the ad hoc recalculation is required, Variable Contributions and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund will be recalculated (and in the case of Variable Contributions demanded) such that the existing size of the Reserve Fund after the injection of the Variable Contributions and the resources which may be appropriated by SEOCH as contributions to the Reserve Fund will cover 115% of the risk exposures of the Reserve Fund throughout the most recent 60 Business Days. If the size of Reserve Fund determined above is higher than the Reserve Fund Threshold, it shall be reduced to an amount equal to the Reserve Fund Threshold.

Notwithstanding the above or any other provisions of these Procedures, SEOCH may assess the adequacy of the Reserve Fund and recalculate the requirements for Variable Contributions based on the abovementioned formula or on such other basis as SEOCH may consider appropriate at its absolute discretion from time to time and following the Capped Liability Period pursuant to Clearing Rule 413F, SEOCH may further at its absolute discretion determine the appropriate aggregate value of the Reserve Fund for the purpose of calculating any Variable Contributions required, and in each of the aforementioned circumstances, SEOCH Participants shall pay to SEOCH such Variable Contributions as may from time to time be demanded by SEOCH.

### 11.3 Methods of Contribution

Initial Contributions can only be made in cash in Hong Kong dollars or in any other currency prescribed by SEOCH from time to time.

Variable Contributions (other than any Assessment or Voluntary Recap Amount) can be made in cash in Hong Kong dollars or in any other currency prescribed by SEOCH from time to time or in an approved form of non-cash collateral.

Demands for Reserve Fund Contributions, whether as a result of an increase in Initial Contributions or Variable Contributions, or reimbursement as a result of excess amount in the Reserve Fund after Top-up payment calculation, will be advised individually and confidentially to each SEOCH Participant by the issuance of a clearing report.

Fig. 1: Examples of the Top-up Process

Prior to the Top-up Calculation

Current Size of Basic Elements of the Reserve Fund:	HK\$130 million
Current Resources which may be appropriated by SEOCH as contributions to the Reserve Fund:	HK\$20 million
Current Size of Variable Contributions:	HK\$50 million

Current SEOCH Reserve Fund Size:	HK\$200 million
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Total Number of SEOCH Participants:	100
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#### Example 1: Size of Reserve Fund Below Reserve Fund Threshold After Top-up Calculation

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

Required Reserve Fund Size:	HK\$220 million
Less: Size of Basic Elements of the Reserve Fund:	HK\$130 million
Less: Resources which may be appropriated by SEOCH as contributions to the Reserve Fund:	HK\$22 million

Required Size of Variable Contributions:	HK\$68 million
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Total Number of SEOCH Participants:	100
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This HK\$68 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 most recent 60 Business Days.

If SEOCH Participant A's share of the newly calculated Variable Contributions 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 Contributions 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

#### Example 2: Size of Reserve Fund Above Reserve Fund Threshold After Top-up Calculation

Using Example 1, if the Reserve Fund Threshold is HK\$210 million, the new construction of the Reserve Fund should be as follows:

Required Reserve Fund Size:	HK\$210 million
Less: Size of Basic Elements of the Reserve Fund:	HK\$130 million

Less: Resources which may be appropriated by SEOCH as contributions to the Reserve Fund:	HK\$21 million
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Required Size of Variable Contributions:	HK\$59 million

The Top-up payment / excess of each SEOCH Participant will then be calculated and demanded from / reimbursed to the SEOCH Participant accordingly.

### 11.3.1 Contributions in Cash and Other Approved Form of Non-Cash Collateral

SEOCH Participants which are required to top-up their Variable Contributions (other than any Assessment or Voluntary Recap Amount) may pay in cash or in an approved form of non-cash collateral that is readily available and free from encumbrances by the start of trading on the due date specified in the clearing report. For cash contributions, SEOCH will direct debit SEOCH Participants' accounts with the Designated Banks or Settlement Banks by 4:00 p.m. on the first Business Day, unless otherwise specified by SEOCH, after the Top-up calculation date or utilise other means of collection as appropriate.

### 11.4 Refund of Surplus Variable Contributions

Refund of the surplus of a SEOCH Participant's Variable Contribution can occur after a Top-up calculation has been performed. If, after a Top-up calculation, the SEOCH Participant has more collateral in the Reserve Fund than is required, SEOCH will return the surplus to the SEOCH Participant via the SEOCH Participant's account with the Designated Bank or Settlement Bank or other means as determined by SEOCH on the first Business Day after the Top-up calculation date.

Notwithstanding the circumstance set forth above, SEOCH shall have the absolute right to withhold any surplus Variable Contribution of a SEOCH Participant for such period as SEOCH may from time to time consider appropriate.

### 11.5 Repealed

### 11.6 Limits on Individual SEOCH Participant Reserve Fund Contributions and Assessments

There shall be no limit to the Reserve Fund Requirement to be demanded from a SEOCH Participant. Subject to Clearing Rule 413J, any demand for the payment of Reserve Fund Contributions made by SEOCH of a SEOCH Participant preceding the effective date of termination of its SEOCH Participantship must be met in full by the resigning SEOCH Participant.

In respect of one or more events of default occurring during a Capped Liability Period, the aggregate liability of a SEOCH Participant to provide Assessments during a Capped Liability Period pursuant to Clearing Rule 413C shall be limited to an amount which is equal to a SEOCH Participant's Reserve Fund Requirement on the Business Day immediately preceding the start of the Capped Liability Period, plus one time such amount, as prescribed in Clearing Rule 413CA.

For example, assume that the Initial Contribution of the SEOCH Participant is HK\$1,500,000 and the Variable Contribution is HK\$500,000 on the Business Day immediately preceding the start of the Capped Liability Period. In this case the maximum liability of the SEOCH Participant to provide Assessments would be HK\$4,000,000 (i.e. two times the aggregate of its Initial Contribution of HK\$1,500,000 and its Variable Contribution of HK\$500,000). In other words, it would only be

obliged to contribute a further amount of HK\$4,000,000 in addition to its existing Reserve Fund Contributions requirement of HK\$2,000,000.

The obligations and liabilities of a SEOCH Participant to provide Assessments in respect of any events of default which occur during a Capped Liability Period which commenced prior to the termination of its SEOCH Participantship shall survive the termination of the SEOCH Participantship notwithstanding the fact that the expiry of such Capped Liability Period occurs after termination, provided that the aggregate liability of the SEOCH Participant shall be limited as provided for in Clearing Rule 413CA and provided that the SEOCH Participant shall not have any obligations or liabilities to provide Assessments in respect of any events of default which occur during a Capped Liability Period which commences after the termination of its SEOCH Participantship.

This maximum liability 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.

**11.7** Repealed

## **11.8 Interest on Variable Contributions**

Interest may be payable or levied on Variable Contributions made in cash at a rate prescribed by SEOCH from time to time (see Appendix I). The total amount of interest earned or levied up to and including the last day of the month will be posted to the SEOCH Participants' respective CCMS Collateral Accounts on the first Business Day of the following month.

The interest rate SEOCH is paying or levying can be enquired on-line through an enquiry function in CCMS. However, as the interest rate is only updated in the afternoon by SEOCH, the interest rate inquired during trading hours may not be the one used in the current day's interest calculation. In addition, there is a CCMS report generated on a monthly basis which lists the total interest earned or levied for the period. Please refer to the *CCMS Terminal User Guide* for details.

## **11.9 SEOCH Appropriation**

If as a result of a Top-up calculation described in 11.2.2, additional resources should be appropriated by SEOCH as contributions to the Reserve Fund or surplus resources should be returned to SEOCH, such appropriation or return will under normal circumstances be effected or set aside on the same day as the day of collection from or return to SEOCH Participants of Variable Contributions following such Top-up calculation.