### Amendment Log

<table>
<thead>
<tr>
<th>Revision</th>
<th>Release Date</th>
<th>Remarks/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>July 2007</td>
<td>First Version</td>
</tr>
</tbody>
</table>
| 2.0      | October 2007    | Second Version  
  - To replace the key requirements of the Clearing Agreement and the submission of a legal opinion by specific clearing obligations of GCP [Chapter 2]  
  - To clarify the termination arrangement [Chapter 8] |
| 3.0      | October 2007    | Third Version  
  - To modify the way GCP’s admission fee will be determined [Chapter 1]  
  - To modify the way GCP’s Guarantee Fund Contribution will be determined [Chapter 7] |
| 4.0      | December 2007   | Fourth Version  
  - Post launch version |
| 5.0      | November 2010   | Fifth Version  
  - To simplify the requirement for the submission of Clearing Agreements by GCP [Chapter 2]  
  - To improve the third party clearing arrangements by removing the one-day prior written notice period requirement for the termination of a Clearing Agreement [Chapter 8] |
| 6.0      | November 2012   | Sixth Version  
  - To modify the way DCP’s minimum cash contribution to the Guarantee Fund will be determined [Chapter 7] |
| 7.0      | January 2016    | Corporate Re-Branding Campaign  
  - Logo, “HKEX”, Font |
| 8.0      | July 2016       | Eighth Version  
  - To change the time of the last batch of Intra-day Trade File and the NCP Marks Projection Report respectively [Chapter 3] |
INTRODUCTION

Hong Kong Exchanges and Clearing Limited (HKEX) introduced Third Party Clearing (TPC) services to the securities market on 3rd December, 2007. Before the launch of TPC, all Exchange Participants of The Stock Exchange of Hong Kong Limited (SEHK) are required to become Broker Participants (re-named as Direct Clearing Participant (DCP) after the launch of TPC) of Hong Kong Securities Clearing Company Limited (HKSCC), and they have to clear and settle all Exchange Trades executed on SEHK in Central Clearing and Settlement System (CCASS) of HKSCC themselves. In CCASS, DCPs clear and settle Exchange Trades either under the Continuous Net Settlement (CNS) system or Isolated Trades (IT) system (a description of the two systems can be found in the HKEX website: http://www.hkex.com.hk/eng/prod/clr/sec_clrsett/p4.htm). Under the CNS system, where HKSCC acts as the central settlement counterparty, DCPs are subject to a number of risk management measures that HKSCC adopts to manage and monitor its counterparty risk exposure (an overview of the risk management measures can be found in the HKEX website: http://www.hkex.com.hk/eng/market/rm/rm_ccrm/cmrm_indexpage.htm).

This document describes, at a high level, the key features introduced by the TPC model to the clearing infrastructure of the securities market.

The TPC model was first presented in a consultation paper issued by HKEX back in 2002 (which can be viewed or downloaded at the TPC corner of the HKEX website: http://www.hkex.com.hk/eng/newsconsul/mktconsul/documents/hkex.pdf). To ensure that the model conforms to the international standards and is in line with the developments in other major financial markets, certain features of the model had since been refined to address various suggestions and comments received from market participants over the past years with reference made to the established market practices overseas.

Readers are reminded that this document is intended for reference only. It may need to be revisited from time to time to ensure that they are current with the latest model being implemented. Readers are therefore encouraged to visit the TPC corner of the HKEX website for most updated information on TPC.
THE MODEL

1. Additional Types of CCASS Participants

Before the launch of TPC (TPC was launch on 3rd December 2007), an Exchange Participant needed to be a CCASS Broker Participant and could only perform self-clearing in CCASS. The TPC model allows the segregation of trading and clearing participantships. An Exchange Participant who trades on SEHK has the option to choose to become a clearing participant in CCASS or outsource its clearing functions to another clearing participant whose business is to provide third party clearing services to Exchange Participants. Under TPC, an Exchange Participant without a clearing participantship in CCASS is referenced as a Non-Clearing Participant (NCP)\(^1\).

Broker Participants of CCASS is replaced by two types of Clearing Participants namely General Clearing Participant (GCP) and Direct Clearing Participant (DCP)\(^2\). Except for Broker Participants who has been re-classified as DCP, other categories of CCASS Participants like Custodian Participants, Investor Participants etc. will not be affected.

1.1 General Clearing Participant (GCP)

A GCP can provide third party clearing services to other Exchange Participants who wish to become an NCP. A GCP\(^3\) is not required to hold any Stock Exchange Trading Right or be an Exchange Participant. If a GCP is also an Exchange Participant, it can clear and settle all of its own and it’s underlying NCPs’ Exchange Trades\(^4\) in CCASS.

Those who are interested to become GCPs should apply to HKEX who will assess their applications based on the following admission criteria:

To become a GCP, an applicant must be either a Licensed Corporation licensed to carry on Type 1 regulated activity or a Registered Institution registered to carry on Type 1 regulated activity under the Securities and Futures Ordinance.

To be eligible to become a GCP, a Licensed Corporation must:
(i) be a company limited by shares incorporated in Hong Kong; and
(ii) have liquid capital of not less than HK$300,000,000 or its required liquid capital under the Financial Resources Rules, whichever is the higher; or

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\(^1\) NCP itself is not a participant type either in SEHK or HKSCC. It is a generic term for ease of classification and reference only.

\(^2\) GCP and DCP are collectively referred to as CCASS Clearing Participants.

\(^3\) Despite the fact that Registered Institution is eligible to become a GCP, Registered Institution is not eligible to become an Exchange Participant.

\(^4\) Exchange Trade is defined in the Rules of the Exchange as a trade in an Eligible Security between two Exchange Participants effected on or reported to the Exchange.
(iii) have paid-up share capital of not less than HK$300,000,000 and liquid capital of not less than HK$100,000,000 or its required liquid capital under the Financial Resources Rules, whichever is the higher.

To be eligible to become a GCP, a Registered Institution must:

(i) have a minimum credit rating of A3 (from Moody’s) or equivalent by a credit rating agency recognized by HKSCC; or

(ii) be a Hong Kong dollar note-issuing bank.

In both of the above cases, an applicant must be able to demonstrate to the satisfaction of HKSCC that it has an established clearing business in securities listed and/or traded on SEHK or it has the financial and operational capacity to establish and operate a clearing business in securities listed and/or traded on SEHK.

Similar to CCASS DCPs, a GCP is required to sign a Participant Agreement and pay admission fee to HKSCC. The admission fee for a GCP is charged at HK$50,000 per Stock Exchange Trading Right held by itself (if GCP is also an Exchange Participant). In the case of a GCP who is not an Exchange Participant, it is still required to pay an admission fee of HK$50,000.

Other requirements applicable to DCPs such as paying Guarantee Fund Contribution, arranging indemnity insurance and/or providing, if required, assurances acceptable to HKSCC in respect of its obligations to HKSCC as a result of its participation in CCASS should also be met upon admission.

To meet these admission requirements, GCP may also need to demonstrate its business capabilities in clearing operations including appropriate internal control measures and a robust risk management framework etc. to the satisfaction of HKSCC. Other than HKSCC’s admission requirements, GCP must fulfill any regulatory requirements of the SFC and HKMA for licensing purpose.

1.2 Direct Clearing Participant (DCP)

A DCP must be an Exchange Participant and can only clear its own trades. The admission requirements of a DCP are the same as those of CCASS Broker Participants in the previous framework (i.e. before 3rd December 2007). An Exchange Participant who continues to self clear in CCASS is a DCP and its rights and obligations in SEHK and HKSCC as a Broker Participant before 3rd December 2007 remains unchanged.

1.3 SEOCH Participation

An Exchange Participant may also trade options on SEHK and clear its options contracts in the Derivatives Clearing and Settlement System (DCASS) of The SEHK Options Clearing House Ltd (SEOCH). Although such Exchange Participant is still required to become an Options Trading Exchange Participant and if it conducts self
clearing, a SEOCH Participant\(^5\), it is no longer required to be a CCASS Clearing Participant under the TPC model. The Exchange Participant can appoint a GCP in CCASS to clear its Exchange Trades on SEHK and handle the clearing and settlement of its exercised/assigned stock options contracts from DCASS, i.e. “Clearing Agency Transactions” as defined in CCASS.

2 Appointment of GCP and Clearing Agreement

2.1 Exchange Participant

Under the TPC model, an Exchange Participant must be either a DCP itself or has appointed a GCP to clear and settle its Exchange Trades in CCASS. Where the Exchange Participant is an NCP and also participates in the Exchange Traded Options Business and is a SEOCH Participant, the appointed GCP is also responsible for the clearance and settlement of the Exchange Participant’s Clearing Agency Transactions in CCASS.

An Exchange Participant who is not a CCASS Clearing Participant can only commence trading on SEHK after its appointment of a GCP has become effective. An Exchange Participant appointing a GCP must submit the Form 11 - Notification of Execution of Clearing Agreement to SEHK. The GCP must ensure that the Clearing Agreement facilitates the performance of, and is consistent with the GCP’s obligations under the CCASS Rules and Operational Procedures. It is not necessary to provide a copy of the Clearing Agreement when submitting such notification. The GCP shall nevertheless be required to supply HKSCC with a certified copy of any executed Clearing Agreement to which it is or has been a party at any time requested by HKSCC to do so. Once HKSCC is notified, the third party clearing relationship in CCASS to support the Exchange Participant’s trading on SEHK will be effected.

2.2 Clearing Obligations of GCP

The key obligations specific to GCP has been included in Chapter 40 of the General Rules of CCASS (CCASS Rules). The details of the rules can be found in the HKEX website:


and are outlined below:

- A GCP should have arrangement in place with each NCP for the NCP to notify it of all Exchange Trades concluded by the NCP, and all Clearing Agency Transactions of which the NCP is a party.

\(^5\) TPC has long been adopted in the stock options market with a number of SEOCH Participants already admitted as GCPs in SEOCH. Therefore, an Exchange Participant may appoint a GCP of SEOCH to clear and settle its options contracts instead.
A GCP should have arrangement in place to monitor the ability of each NCP with whom it has entered into a Clearing Agreement to satisfy promptly all obligations arising from the Exchange Trades and Clearing Agency Transactions concluded by such NCP. A GCP must forthwith notify HKSCC of any failure of its NCP to meet its obligations under the Clearing Agreement.

A GCP should, within a period as HKSCC may specify, provide information in its possession about its NCPs to HKSCC, including but not limited to, financial position, a NCP’s underlying client information or any other information or documents as HKSCC may demand.

A GCP should ensure that the Clearing Agreement to which it is or has been a party, and all subsequent agreements to amend the Clearing Agreement do not contain any provision which is inconsistent with the Rules and has terms and conditions to facilitate the performance of, and be consistent with, the GCP’s obligations under the Rules. The Clearing Agreement should incorporate any additional conditions prescribed by HKSCC from time to time. A GCP shall be bound by and comply strictly with the terms of each Clearing Agreement to which it is or has been a party, to the extent that those Clearing Agreements are consistent with the Rules.

A GCP should notify HKSCC of any changes to any of the Clearing Agreements it entered into forthwith upon such changes being made. For the avoidance of doubt, a GCP must ensure that any changes to the Clearing Agreement and any amendment agreement are in compliance with these Rules.
3 Trade Execution, Clearing and Settlement

3.1 Execution of Exchange Trades

The TPC model does not change how an Exchange Participant executes its trade orders on SEHK. For NCP, once an Exchange Trade is effected on or reported to SEHK, the NCP concerned will be substituted by its GCP as a party to the Exchange Trade. The GCP will then take up the clearing and settlement obligations regarding the Exchange Trade. The following diagram shows the trading and settlement flow under the TPC model:

![Diagram showing trading and settlement flow]

3.2 Clearing and Settlement

Exchange Trades are cleared and settled under either the Continuous Net Settlement (CNS) system or Isolated Trade (IT) system in CCASS. DCP and GCP are responsible for settling CNS trades with HKSCC after novation and on a netted basis. Settlement of Isolated Trades is on a bilateral trade-by-trade basis directly between the clearing participants and in the case of an NCP, its GCP and the original trading counterparty of the NCP (or it’s GCP, where applicable).

If an Exchange Participant is a DCP, its trades will be captured in its own CCASS account; same as for a Broker Participant today. For Exchange Trades executed by an NCP on SEHK, they are cleared and settled by its GCP and hence all its Exchange Trades will be automatically routed to its GCP’s account in CCASS. Selective give-up and take-up arrangement at individual trade level is not allowed. If a GCP provides clearing services to more than one NCP, all Exchange Trades executed by these NCPs on SEHK will be routed to the same account of the GCP in CCASS and for those Exchange Trades to be settled under the CNS system, they will be netted for settlement purpose.
GCP is responsible to develop its own risk management capability in monitoring its exposure to NCP, which may involve providing appropriate trading and back office systems to intercept NCP’s trades prior to or immediately after trade orders have been executed on SEHK. In order to facilitate GCP’s monitoring process, CCASS provides Intra-day Trade File ten times on each trading day shortly after 09:45, 10:15, 10:45, 11:30, 12:00, 13:15, 14:00, 14:45, 15:30 and 16:25 (Report Description: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/T02a_CCLID01.pdf; Report Data Download File Layout: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/D4402a_CCLID01.pdf) and NCP Marks Projection Report after the intraday marks processing at around 11:45 and day-end mark processing at 20:15 (Report Description: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/T17a_CRMNP01.pdf; Report Sample: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/T4317a_CRMNP01.pdf) for GCP to track its risk exposure at NCP level. To support GCP’s clearing and settlement operations, two existing CCASS reports namely Provisional Clearing Statement and Final Clearing Statement are also enhanced to provide the trade details and CNS positions at its underlying NCP level (Report Description: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/T01_CCLTN04.pdf and http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/T02_CCLTN05.pdf; Report Sample: http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/tg01_ccltn04.pdf and http://www.hkex.com.hk/eng/market/clr/secclr/ccass3/parttug/documents/tg02_ccltn05.pdf). In addition, an on-line function is provided for GCP to enquire the details of all its third party clearing relationships and the relevant details of each clearing arrangement, including the commencement and termination dates for each clearing relationship.

If there is trade amendment on T+1, the amendment remains to be submitted to SEHK by the relevant Exchange Participant. For NCP, the amended trades will automatically be updated to the account of its GCP for clearing and settlement purpose.

The existing buy-in procedures apply to both DCP and GCP if short CNS positions remain undelivered at the end of the settlement date, i.e. T+2, unless exemption of buy-in has been granted by HKSCC. Same as today’s practice, HKSCC continues to initiate its compulsory stock borrowing programme at the end of T+2 to meet its settlement obligations to receiving clearing participants as a result of the undelivered short CNS positions. Both DCP and GCP can become lenders under this programme.
4. **Clearing Agency Transactions**

An NCP’s clearing and settlement obligation in respect of a Clearing Agency Transaction in SEOCH is substituted by its GCP as a party to the transaction upon the exercise/assignment of a stock options contract in DCASS. The NCP’s Clearing Agency Transactions are recorded in CCASS in the name of its GCP and captured in the GCP’s CCASS account automatically. In line with the existing process in clearing and settling Clearing Agency Transactions for DCPs, HKSCC acts as the central counterparty to all transactions through a novation process. All Exchange Trades and Clearing Agency Transactions on account of the GCP, whether for itself or for its underlying NCPs, if settled under the CNS system are netted for settlement purpose.

A GCP providing clearing services to an NCP in respect of Clearing Agency Transactions also needs to manage the NCP’s stock collaterals maintained in the Common Collateral Management System (CCMS) of HKSCC. The NCP can, having made prior arrangement with the GCP, make use of its securities deposited in the CCASS account of the GCP as collateral for its participation in SEOCH purpose.

5. **Client Account Arrangement**

An Exchange Participant becoming an NCP is no longer required to be a CCASS Participant. Securities of the NCP and its clients need to be kept with the GCP (unless the NCP or its clients have appointed their own custodians) based on the commercial arrangement agreed between the NCP and GCP. Generally, an NCP can adopt either the “fully disclosed” or “omnibus” approaches in managing client accounts for its clients. Under the “fully disclosed” account arrangement, NCP discloses client information to the GCP who establishes securities account directly with each of the NCP’s clients. These individual client accounts are therefore only carried in the books of the GCP and not the NCP. Under the “omnibus” account arrangement, an NCP maintains an omnibus account with the GCP and the NCP maintains client accounts and retains full responsibility on providing client side services including client settlements. Nevertheless, an NCP may use a combination of both approaches in managing its clients’ portfolios and relationships.

6. **Depository and Nominee Services**

HKSCC operates the CCASS Depository which provides deposit and withdrawal services to all CCASS Participants. With TPC, an NCP does not have direct access to CCASS as it is not a CCASS Participant. Its securities holdings (including client securities) are maintained by the GCP in CCASS either on a fully disclosed account basis or an omnibus account basis. As a result, all deposits or withdrawals of share certificates with CCASS are processed on account of the GCP.
An NCP who wishes to deposit or withdraw share certificates directly at CCASS Depository can do so by obtaining proper authorisation from its GCP in accordance with the CCASS Rules and CCASS Operational Procedures. It should be noted that any deposit made under this arrangement into the CCASS stock account of a GCP is deemed as a deposit made by the GCP itself and HKSCC applies risk management measures against defective securities on account of the GCP. If client securities of an NCP are handled directly by a GCP under the fully disclosed account arrangement, the GCP should follow the current CCASS Rules and CCASS Operational Procedures to deposit and withdraw share certificates for these clients.

Similarly, HKSCC provides nominee services to CCASS Participants only. For client securities kept directly with the GCP under the fully disclosed account arrangement, the GCP is the intermediary providing nominee services to these clients whereas an NCP who holds securities for its clients under the omnibus account arrangement still acts as the intermediary of its clients and provide nominee services to them directly.

7. **Risk Management Measures adopted by HKSCC**

The current risk management measures on CNS trades and defective securities apply to both DCP and GCP. These risk management measures include trade isolation, securities-on-hold, marking-to-market and collection of marks and collaterals. As NCP becomes a client of the GCP, no special risk management measures is imposed directly on NCP by HKSCC (this concept is consistent with the handling of DCP today as no risk management measure is imposed by HKSCC directly on DCP’s clients).

The Guarantee Fund Contribution mechanism applies to both DCP and GCP who assumes all clearing obligations of its NCPs. While a DCP is subject to a minimum cash contribution of the higher of HK$50,000 or HK$50,000 per each Stock Exchange Trading Right held by the DCP, the minimum cash contribution of a GCP is the higher of HK$150,000 or the sum of $50,000 per each Stock Exchange Trading Right held by the GCP (if applicable) and $50,000 per each NCP engaged. Both DCP and GCP are required to make regular contribution to the Guarantee Fund, the amount of which is determined by reference to the DCP’s or GCP’s share of the average daily net CNS positions for the previous month subject to their respective minimum contributions. It should be noted that whenever the Guarantee Fund Contribution of a DCP or GCP is applied, the DCP or GCP is required to promptly replenish the deficiency of its contributions in the events occurring before the termination of its participation in CCASS. Even if a DCP or GCP opts out for contributions exceeding limit, by electing to terminate its participation in CCASS, the replenished amount will be equal to GCP’s required contribution at the date of receipt by HKSCC of such termination (opt out) notice, plus two times such amount.
8. Special Trading Arrangement for NCP

An Exchange Participant is not allowed to trade on SEHK if it cannot cause all its Exchange Trades to be settled through CCASS in accordance with the CCASS Rules. In the case of an NCP, it means that the NCP will not be allowed to trade if it does not have a valid, binding and effective Clearing Agreement with a GCP. Unless otherwise terminated, theClearing Agreement is deemed to be terminated when the GCP is declared as a defaulter (and hence ceases to be a CCASS Participant) or suspended from further activities in CCASS under the CCASS Rules. Similar to the practice of other international markets, trading restriction on an NCP when its GCP is suspended or terminated as a GCP will continue until the NCP has appointed another GCP to clear and settle its trades and lodged with HKSCC a new Clearing Agreement or become a DCP.

In the case of termination of a Clearing Agreement, the NCP/GCP shall submit the Form 12 - Notification of Termination of Clearing Agreement to SEHK. The party who initiates the termination is also required to inform the other party to the Clearing Agreement at the same time. Both the NCP and GCP are obliged to notify SEHK and HKSCC respectively as early as possible once a decision to terminate a Clearing Agreement has been made. When HKSCC receives a termination notice from a GCP, HKSCC will acknowledge receipt of such termination notice to the party who submits the termination notice (with a copy to the NCP concerned) in writing and unless and until written acknowledgement has been issued to the GCP, the Clearing Agreement shall be treated as valid, binding and effective notwithstanding any provision to the contrary in the Clearing Agreement and/or the termination notice. In addition, upon receipt of the termination notice and where the NCP is also a SEOCH Participant, HKSCC will notify SEOCH of such termination. HKSCC will effect the termination as soon as possible and the NCP concerned will not be allowed to trade on SEHK once termination is effective until the NCP has appointed another GCP or become a DCP. A GCP is continued to be held responsible for clearing and settling all Exchange Trades and Clearing Agency Transactions executed by its NCP prior to the effective termination date of the Clearing Agreement between the NCP and GCP.

9. Fee Structure

The existing CCASS tariff applies to all Clearing Participants. Whether additional CCASS service fee is applicable under the TPC model is subject to review from time to time, although this is not anticipated at this stage. Finally, as NCP is not a CCASS Participant, it will not be subject to any CCASS service fees.