# Section 13

# **Securities Settlement**

#### 13.1 GENERAL

#### 13.1.1 DIs or Batch-settlement-runs or on-line delivery to effect delivery in CCASS

CCASS is designed to give Participants a high degree of flexibility to cater for their priorities for settlement of transactions in CCASS (CNS stock positions arising from Exchange Trades, China Connect Securities Trades and Clearing Agency Transactions and other stock positions arising from Isolated Trades including Clearing Agency Transactions, ISI Transactions, SI Transactions and Compulsory Stock Borrowing Transactions).

In most cases, to effect settlement in CCASS, a delivering Participant may rely on one of the three methods:

- (i) the input of Delivery Instructions;
- (ii) the multiple Batch-settlement-runs effected on each Settlement Day; or
- (iii) on-line delivery for ISI Transactions or SI Transactions to be settled in CCASS on a RDP basis by HKSCC.

A delivering Participant wishing to settle a particular transaction first will always be able to do so by the use of a DI, instead of relying on the Batch-settlement-runs which will be processed by HKSCC based on a pre-determined sequence (see further Section 13.3.4 and Section 13.3.6)

Further, in relation to Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions, a delivering Participant can also exclude such transactions from Batch-settlement-runs. In the case of an Isolated Trade (including a Clearing Agency Transaction), the delivering Participant can always make use of the "Change DI Requirement" function available through its CCASS Terminals or Participant Gateways to specify that a DI will be required to effect settlement of that Isolated Trade. In the case of an ISI or SI Transaction, the delivering Participant can either specify at the time of input of an ISI or SI or subsequently by the use of the "Change DI Requirement" function, that a DI will be required to effect settlement.

On-line delivery will be effected by HKSCC in accordance with section 12.3.6(ii) upon input of an ISI (without affirmation) or affirmation of an ISI (with affirmation) by the Investor Participant concerned where there are sufficient Eligible Securities in the Stock Account of the delivering Participant concerned. However, if an ISI Transaction is to be settled in CCASS on a DVP basis and the delivering Participant requires the on hold mechanism to be operated, delivery will be effected upon obtaining Negative Confirmation of Payment from the Designated Bank of the receiving Participant on the next Business

Day; and in the case of an ISI Transaction or SI Transaction to be settled in CCASS on a RDP basis, delivery will be effected upon receipt of confirmation of payment from the Clearing House of HKAB.

A Participant wishing to settle a delivering SI Transaction with the Eligible Securities received from a particular SI Transaction (with identical details in respect of stock code, settlement date and settlement account) can assign an identical "SI linkage reference" to both SIs during SI input. As the system captures the identical reference, the on-hold mechanism will operate so that the Eligible Securities credited to the Participant's settlement account with respect to the receiving SI will be applied solely for the settlement of the designated delivering SI with the same SI linkage reference during settlement process. After assigning a SI linkage reference to the SIs, a Participant may still settle the obligation to deliver under the delivering SI using other Eligible Securities available in the Participant's settlement account by the input of a Delivery Instruction for immediate settlement or the deletion of the "SI linkage reference" from the delivering SI for settlement via a Batchsettlement-run. Notwithstanding the settlement of the delivery obligation using other available securities, the Eligible Securities received under the receiving SI and subject to the on-hold mechanism shall not be released until the end of the Final Batch-settlement-run on that Settlement Day unless the Participant has deleted the "SI linkage reference" from the receiving SI via the "Change Matched/Settled SI" function.

A delivering or receiving Participant wishing to hold settlement of an SI Transaction after successful matching can select the Hold Matched SI requirement field as "Yes" during SI input or via the "Change Hold Matched SI" function. Settlement of such SI Transaction will not be effected until the matched on hold status has been released by the initiating party or parties, as the case may be. Similarly, an ISI Transaction can be held from settlement if the Participant other than an Investor Participant sets the "Hold Before Settlement" field as "Yes" during ISI input or via the "Hold/Release ISI" function during subsequent update. Settlement of such ISI will not be effected until the on hold mechanism has been released by the Participant.

## 13.1.1A Intra-day Counter Transfer Instructions

With respect to certain Multi-counter Eligible Securities designated by HKSCC from time to time, a Clearing Participant or Clearing Agency Participant may submit Intra-day Counter Transfer Instructions to HKSCC at or before 3:00 p.m. on a Settlement Day, via CCASS Terminal or such other means as may be specified by HKSCC from time to time, to facilitate settlement of such Multi-counter Eligible Securities at the final Batch-settlement-run at 3:45 p.m.

A Clearing Participant or Clearing Agency Participant may submit one-off or standing Intraday Counter Transfer Instructions to HKSCC. Pursuant to an Intra-day Counter Transfer Instruction provided by a Clearing Participant or Clearing Agency Participant, HKSCC will compare the availability of the Multi-counter Eligible Securities under the different stock codes in its Stock Clearing Account and will, to the extent there is a shortfall in one stock code to meet its delivering obligations for settlement and a surplus in another stock code, effect an automatic transfer of surplus Multi-counter Eligible Securities from the other stock

code to such stock code up to the amount of the shortfall provided that the Multi-counter Eligible Securities concerned are of the same class.

Any standing Intra-day Counter Transfer Instruction submitted by a Clearing Participant or Clearing Agency Participant authorizes HKSCC to generate recurring Intra-day Counter Transfer Instructions on its behalf on each Settlement Day. Clearing Participants and Clearing Agency Participants are requested to refer to the CCASS Terminal User Guide for further information on the use of the relevant maintenance function.

#### 13.1.2 Stock Accounts used for settlement

Except as otherwise provided in the Operational Procedures, the Stock Clearing Accounts of Participants other than Investor Participants and the Stock Accounts of Investor Participants will be used to make or take deliveries of Eligible Securities for the purpose of settlement of transactions in CCASS.

Accordingly, delivering Participants should ensure that there are sufficient Eligible Securities in their Stock Clearing Accounts/Stock Accounts for settlement purposes.

Similarly, receiving Participants (other than Investor Participants) may wish to move Eligible Securities out of their Stock Clearing Accounts upon receipt from other Participants.

The Stock Clearing Account of a Participant other than an Investor Participant may not be used for settlement purposes in CCASS if a Participant initiates settlement by the input of a DI. In such a case, the Participant can specify any of its Stock Accounts (other than its Stock Collateral Control Account and where the Participant is a TSF CCASS Participant, other than its TSF Accounts) from which Eligible Securities should be debited. A Participant can also specify for a SI Transaction which Stock Account (other than its Stock Collateral Control Account) from which or to which Eligible Securities should be debited or credited.

#### 13.1.3 Partial deliveries

Partial deliveries in CCASS will only be allowed in respect of CNS stock positions of Clearing Participants or Clearing Agency Participants and Isolated Trades (including Clearing Agency Transactions) to be settled on an FOP basis.

No partial delivery will be allowed in respect of SI and ISI Transactions.

# 13.1.4 Money settlement

Settlement of CNS stock positions of Clearing Participants and Clearing Agency Participants will always be on a DVP basis.

Settlement of Isolated Trades (including Clearing Agency Transactions) may be on a DVP or FOP basis, as stipulated by the Participants concerned.

Settlement of ISI or SI Transactions may be on a RDP, DVP or FOP basis, stipulated by the Participants concerned.

Further details are set out in Section 14.

## 13.2 SETTLEMENT BY DIS

## 13.2.1 Transactions which may be settled by DIs

All transactions other than Compulsory Stock Borrowing Transactions in CCASS may be settled by the delivering Participants other than Investor Participants by the input of DIs on or after the due settlement dates of such transactions.

Participants other than Investor Participants can monitor their settlement positions and can input DIs at any time during the operational hours of CCASS to effect settlement.

DIs for the settlement of Eligible Securities must be input into CCASS before the commencement of each Batch-settlement-run on each Settlement Day.

# 13.2.2 Transactions which must be settled by DIs

Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions which are stipulated by the delivering Participants other than Investor Participants to require settlement by DIs only must be settled by DIs.

## 13.2.3 "Change DI Requirement" function

As mentioned, in relation to Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions, a delivering Participant other than an Investor Participant may at any time before the settlement of such transactions make use of the "Change DI Requirement" function available through its CCASS Terminals or Participant Gateways to specify that such transactions are to be settled by the input of DIs only and not to be included in the respective Batch-settlement-runs.

## 13.2.4 "Input DI" function

To input a DI, a delivering Participant other than an Investor Participant may use the "Input DI" function available via its CCASS Terminals or Participant Gateways and will identify the transaction to be settled by keying in the relevant number assigned to such transaction in CCASS.

The following details will have to be included in a DI:

- (i) the Stock Account to be used to effect settlement by the DI;
- (ii) whether full or partial delivery is to be made (partial delivery is only allowed for CNS stock positions and Isolated Trades including Clearing Agency Transactions on a FOP basis) and in the case of partial delivery, the quantity of Eligible Securities to be delivered by the DI; and
- (iii) in the case of a DI to effect settlement of an Isolated Trade (including a Clearing Agency Transaction), payment instructions as to whether settlement is to be on a DVP

or FOP basis.

Further information regarding the data fields of the Input DI function relating to the four types of transactions (i.e. CNS stock positions, Isolated Trades including Clearing Agency Transactions, ISI Transactions and SI Transactions) are set out in the CCASS Terminal User Guide for Participants.

## 13.2.5 Immediate delivery

DIs input by Participants other than Investor Participants usually will be given effect to in CCASS immediately by HKSCC. In the case of ISI or SI Transactions to be settled in CCASS on a RDP basis, shares will be put on-hold upon DIs input by Participants other than Investor Participants pending receipt of confirmation of payment of such transactions from the Clearing House of HKAB.

## 13.2.6 DIs not accepted

Settlement of a transaction by a DI input by a Participant other than an Investor Participant will not be given effect to in CCASS in the following cases:

- (i) where the transaction to be settled as stated by the DI is not yet due for settlement;
- (ii) where the Stock Account stipulated by the Participant to be used has an insufficient available balance of relevant Eligible Securities for the purpose of the DI;
- (iii) where the transaction identified by the DI has already been settled;
- (iv) where a DI attempts to effect partial delivery in respect of an Isolated Trade (including a Clearing Agency Transaction) to be settled on a DVP basis;
- (v) where a DI attempts to effect partial delivery in respect of an ISI Transaction or SI Transaction;
- (vi) where a DI attempts to effect settlement of an SI Transaction, whose settlement has been put on hold by either or both of the delivering and receiving Participants;
- (vii) where a DI attempts to effect settlement of an ISI Transaction, whose settlement has been put on hold by the Participant;
- (viii) where a DI attempts to effect settlement of an SI Transaction in a China Connect Security which has (i) an outstanding short CNS position in such China Connect Security before the completion of the fourth Batch-settlement-run unless the delivering account of such SI Transaction is a Special Segregated Account or (ii) an overdue short CNS position in such China Connect Security after the fourth Batch-settlement-run unless any of the circumstances as referred to in Section 12.1.6 (vi)(e) to effect an SI Transaction is met; and
- (ix) where a DI attempts to effect settlement of an SI transaction in a China Connect

Security on a RDP basis after the specified input deadline.

#### 13.3 SETTLEMENT BY BATCH-SETTLEMENT-RUNS

### 13.3.1 Transactions settled by Batch-settlement-runs

Other than (i) those transactions which are specified to require the input of DIs by the delivering Participants other than Investor Participants to effect settlement (see Section 13.2.3); (ii) SI Transactions whose settlement has been put on hold by either or both of the delivering and receiving Participants after successful matching (see Section 12.1.6(ii)); and (iii) ISI Transactions whose settlement has been put on hold by a Participant other than an Investor Participant (see Section 12.3.6 (vii)), transactions in CCASS may be settled by the multiple Batch-settlement-runs effected by HKSCC on each Settlement Day.

ISI and SI Transactions to be settled in CCASS on an RDP basis will be excluded from the final Batch-settlement-run on each Settlement Day.

#### 13.3.2 Batch-settlement-runs

Each Batch-settlement-run will involve relevant Eligible Securities in the Stock Clearing Accounts of the delivering Participants being automatically debited in respect of transactions to be settled (based on a pre-determined sequence - see Section 13.3.4) and then credited to the Stock Clearing Accounts of the receiving Participants other than Investor Participants or Stock Accounts of the receiving Investor Participants (in the case of deliveries made to settle CNS long stock positions, based on a pre-determined allocation algorithm - see Section 13.4).

In the case of ISI or SI Transactions to be settled in CCASS on a RDP basis by Batch-settlement-run, the sufficient available shares in the Stock Account of delivering Participants will be put on-hold pending on-line delivery upon receipt of confirmation of payment of such transactions from the Clearing House of HKAB.

The processing in the final Batch-settlement-run shall be conducted in accordance with the provisions in Section 6.2.

### 13.3.3 Frequency of Batch-settlement-runs

For Eligible Securities other than China Connect Securities, four Batch-settlement-runs are carried out every Settlement Day, at 10:30 a.m., 12:00 noon, 2:00 p.m. and 3:45 p.m..

For China Connect Securities, five Batch-settlement-runs are carried out every Settlement Day, at 4:45 p.m., 5:30 p.m., 6:15 p.m., 7:00 p.m. and 7:45 p.m. For the final Batch-settlement-run at 7:45 p.m., only SI stock positions on a DVP or FOP basis will be settled.

## 13.3.4 Delivery - processing sequence of short positions

Different delivery positions of a Participant in the same Eligible Security may be included in a Batch-settlement-run. For Clearing Participants, these may include CNS stock positions, Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions. For Clearing Agency Participants, these may include CNS stock positions,

Clearing Agency Transactions and SI Transactions, where applicable. For other Participants other than Investor Participants, ISI Transactions and SI Transactions will be included in a Batch-settlement-run. For Investor Participants, ISI Transactions will be included in a Batch-settlement-run.

In relation to a delivering SI input with an "SI linkage reference" code, settlement of the transaction will only be effected if the corresponding receiving SI has been settled and there is sufficient "on hold" Eligible Securities and/or available Eligible Securities in the stipulated settlement account.

In relation to a matched on hold SI, settlement of the SI Transaction will only be effected if the matched on hold status has been released by the initiating party or parties, as the case may be. In relation to an ISI with "pending for settlement" status whose settlement has been put on hold, settlement will only be effected if the on hold mechanism has been released by the Participant other than an Investor Participant.

In general, where delivery positions arising out of different types of transactions in the same Eligible Security are included in a Batch-settlement-run, settlement will be processed in CCASS in the following order:

- (i) CNS stock positions;
- (ii) Isolated Trades (including Clearing Agency Transactions); and
- (iii) SI/ISI Transactions.

Notwithstanding the above, where the delivering Participant other than Investor Participant is the seller in a Buy-in, the Buy-in short stock position will have the highest priority for settlement in a Batch-settlement-run.

Within each type of transaction in the same Eligible Security included in a Batch-settlementrun, settlement processing will also be effected based on pre-determined sequences.

In the case of CNS short stock positions in the same Eligible Security of a Participant, the oldest CNS short stock position of a Participant will be settled first in a Batch-settlement-run. In case of Isolated Trades (including Clearing Agency Transactions) in the same Eligible Security, settlement processing will be in the following order:

- (i) age (oldest) the trade which has remained unsettled for the longest time; and if this is the same, then
- (ii) price (highest) the trade which has the highest position price (i.e. position amount divided by position quantity); and if this is the same, then
- (iii) position (smallest) the trade which has the smallest position size (i.e. quantity); and if this is the same, then

(iv) random.

For SI/ISI Transactions in the same Eligible Security, settlement processing will be in the following order:-

- (i) Overdue SI/ISI Transactions are settled before due SI/ISI Transactions. With respect to overdue SI/ISI Transactions, its due settlement date will not affect its settlement priority determined in accordance with the following paragraphs.
- (ii) Overdue SI/ISI Transactions for settlement on the RDP basis are settled before overdue SI/ISI Transactions for settlement on the DVP basis.
- (iii) Among overdue SI/ISI Transactions for settlement on the RDP basis, settlement priority shall be based on transaction value.
  - (a) Those with transaction values equal to or above HK\$1 billion are treated as having the same transaction value and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
  - (b) Those with transaction values below HK\$1 billion and equal to or above HK\$1,000 are settled in the order of priority based on their transaction values. Those with the highest transaction values are settled with priority over those with a lower transaction value. SI/ISI Transactions will be valued in increments of HK\$1,000, to illustrate, SI/ISI Transactions having values between HK\$1,000 and HK\$1,999 will all be valued at HK\$1,000; SI/ISI Transactions having values between HK\$2,000 and HK\$2,999 will all be valued at HK\$2,000, et seq. Such SI/ISI Transactions having values between HK\$1,000 and HK\$1,999, et seq., will be settled by reference to matching/affirmation time.
  - (c) SI/ISI Transactions with transaction values below HK\$1,000 are treated as having the same transaction value and are settled in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
- (iv) Overdue SI/ISI Transactions for settlement on the DVP basis are settled before overdue SI/ISI Transactions for settlement on the FOP basis.
- (v) Among overdue SI/ISI Transactions for settlement on the DVP basis, settlement priority shall be based on transaction value.
  - (a) Those with transaction values equal to or above HK\$1 billion are treated as having the same transaction value and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.

- (b) Those with transaction values below HK\$1 billion and equal to or above HK\$1,000 are settled in the order of priority based on their transaction values. Those with the highest transaction values are settled with priority over those with a lower transaction value. SI/ISI Transactions will be valued in increments of HK\$1,000, to illustrate, SI/ISI Transactions having values between HK\$1,000 and HK\$1,999 will all be valued at HK\$1,000; SI/ISI Transactions having values between HK\$2,000 and HK\$2,999 will all be valued at HK\$2,000, et seq. Such SI/ISI Transactions having values between HK\$1,000 and HK\$1,999, et seq., will be settled by reference to matching/affirmation time.
- (c) SI/ISI Transactions with transaction values below HK\$1,000 are treated as having the same transaction value and are settled in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
- (vi) Among overdue SI/ISI Transactions for settlement on the FOP basis, settlement priority shall be based on transaction quantity.
  - (a) Those with transaction quantities equal to or above 1 billion shares are treated as having the same transaction quantity and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
  - (b) Those with transaction quantities below 1 billion shares and equal to or above 1,000 shares are settled in the order of priority based on their transaction quantities. Those with the highest transaction quantities are settled with priority over those with a lower transaction quantity. SI/ISI Transactions will be classified in intervals of 1,000 shares, to illustrate, SI/ISI Transactions having transaction quantities between 1,000 and 1,999 shares will all be treated as having a transaction quantity of 1,000 shares; SI/ISI Transactions having transaction quantities between 2,000 and 2,999 shares will all be treated as having a transaction quantity of 2,000 shares, et seq. Such SI/ISI Transactions having transaction quantities between 1,000 and 1,999 shares et seq. will be settled by reference to matching/affirmation time.
  - (c) SI/ISI Transactions with transaction quantities below 1,000 shares are treated as having the same transaction quantity and are settled in the order of priority based on their position numbers allocated by reference to matching affirmation time.
- (vii) Due SI/ISI Transactions for settlement on the RDP basis are settled before due SI/ISI Transactions for settlement on the DVP basis.
- (viii) Among due SI/ISI Transactions for settlement on the RDP basis, settlement priority shall based on transaction value.

- (a) Those with transaction values equal to or above HK\$1 billion are treated as having the same transaction value and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
- (b) Those with transaction values below HK\$1 billion and equal to or above HK\$1,000 are settled in the order of priority based on their transaction values. Those with the highest transaction values are settled with priority over those with a lower transaction value. SI/ISI Transactions will be valued in increments of HK\$1,000, to illustrate, SI/ISI Transactions having values between HK\$1,000 and HK\$1,999 will all be valued at HK\$1,000; SI/ISI Transactions having values between HK\$2,000 and HK\$2,999 will all be valued at HK\$2,000, et seq. Such SI/ISI Transactions having values between HK\$1,000 and HK\$1,999, et seq., will be settled by reference to matching/ affirmation time.
- (c) SI/ISI Transactions with transaction values below HK\$1,000 are treated as having the same transaction value and are settled in the order of priority based on their position numbers allocated by reference to matching/ affirmation time.
- (ix) Due SI/ISI Transactions for settlement on the DVP basis are settled before due SI/ISI Transactions for settlement on the FOP basis.
- (x) Among due SI/ISI Transactions for settlement on the DVP basis, settlement priority shall be based on transaction value.
  - (a) Those with transaction values equal to or above HK\$1 billion are treated as having the same transaction value and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
  - Those with transaction values below HK\$ 1 billion and equal to or above HK\$1,000 are settled in the order of priority based on their transaction values. Those with the highest transaction values are settled with priority over those with a lower transaction value. SI/ISI Transactions will be valued in increments of HK\$1,000, to illustrate, SI/ISI Transactions having value between HK\$1,000 and HK\$1,999 will all be valued at HK\$1,000; SI/ISI Transactions having values between HK\$2,000 and HK\$2,999 will all be valued at HK\$2,000, et seq. Such SI/ISI Transactions having values between HK\$1,000 and HK\$1,999 et seq., will be settled by reference to matching/affirmation time.
  - (c) SI/ISI Transactions with transaction values of less than HK\$1,000 are treated as having the same transaction value and are settled in the order of priority

based on their position numbers allocated by reference to matching/affirmation time.

- (xi) Among due SI/ISI Transaction for settlement on the FOP basis, settlement priority shall be based on transaction quantity.
  - (a) Those with transaction quantities equal to or above 1 billion shares are treated as having the same transaction quantity and settled first in the order of priority based on their position numbers allocated by reference to matching/affirmation time.
  - (b) Those with transaction quantities below 1 billion shares and equal to or above 1,000 shares are settled in the order of priority based on their transaction quantities. Those with the highest transaction quantities are settled with priority over those with a lower transaction quantity. SI/ISI Transactions will be classified in intervals of 1,000 shares, to illustrate, SI/ISI Transactions having transaction quantities between 1,000 and 1,999 shares will all be treated as having a transaction quantity of 1,000 shares; SI/ISI Transactions having transaction quantities between 2,000 and 2,999 shares will all be treated as having a transaction quantity of 2,000 shares, et seq. Such SI/ISI Transactions have transaction quantities between 1,000 and 1,999 shares, et seq., will be settled by reference to matching/affirmation time.
  - (c) SI/ISI Transactions with transaction quantities below 1,000 shares are treated as having the same transaction quantity and settled in the order of priority based on their position numbers allocated by reference to matching/affirmation time.

No partial settlement in respect of Isolated Trades (including Clearing Agency Transactions), ISI and SI Transactions will be allowed in a Batch-settlement-run. The available stock balance in a Stock Clearing Account will be used to settle in full any other delivery position with a lower priority.

In brief therefore, where delivery positions arising out of different types of transaction in the same Eligible Security are included in a Batch-settlement-run, settlement will be processed in the following order:

- (i) Buy-ins for Eligible Securities other than China Connect Securities (to be settled under the Isolated Trades System);
- (ii) CNS stock positions, including Buy-ins for China Connect Securities (priority by reference to age);
- (iii) Isolated Trades including Clearing Agency Transactions (priority by reference to age, then highest position price, then smallest position size and then random); and

(iv) SI/ISI Transactions (priority by reference to due/overdue status, then payment method RDP/DVP/FOP, then highest transaction value, then highest transaction quantity and then time of matching/affirmation).

# 13.3.5 Example (delivery - processing sequence, with reference to the processing schedule for Eligible Securities other than China Connect Securities)

# (a) Example of processing sequence of short positions

Participant A has the following delivery positions in stock X to be settled in a Batch-settlement-run on S-day:

Transaction	Due date of settlement	Age	Quantity	Position price	Time of matching (if any)
CNS1	S-1	1	1,000	\$1.10	
CNS2	S	0	4,000	\$1.10	
SI1	S	0	5,000	\$1.25	11:30 a.m.
					(on S-day)
SI2	S	0	2,000	\$1.30 2	:00 p.m. (on
					S-day)
IT1	S-1	1	1,000	\$1.20	
IT2	S-2	2	600	\$1.00	
IT3	S	0	400	\$1.30	
IT4	S-2	2	100	\$1.00	
IT5*	S-1	1	500	\$1.23	
IT6***	S	0	400	\$1.30	
IT7**	S	0	1,000	\$1.10	
			16,000		
			======		

<sup>\*</sup> IT5 is a position already partially settled by a DI on a FOP basis. Participant A opts to rely on Batch-settlement-runs to effect settlement of the remaining stock position of 500. Settlement of this partially settled position will be on an FOP basis under a Batch-settlement run. However, the position price of IT5 is still relevant to the processing sequence in a Batch-settlement-run.

Based on the processing sequence described in Section 13.3.4, the settlement sequence in respect of the delivery positions of Participant A in stock X will be:

Settlement				<b>Position</b>	
order	Transaction	Age	Quantity	price	Reasons

<sup>\*\*</sup> IT7 is a Buy-in trade.

<sup>\*\*\*</sup> IT6 is a Clearing Agency Transaction. Other ITs are Exchange Trades.

1.	IT7	0	1,000	\$1.10	Highest priority
2.	CNS1	1	1,000	\$1.10	for Buy-in 2nd priority for
۷.	CNSI	1	1,000	φ1.10	CNS (age)
3.	CNS2	0	4,000	\$1.10	CNS (age)
		•	-		
4.	IT4	2	100	\$1.00	3rd priority for
					IT (age & size)
5.	IT2	2	600	\$1.00	Age
6.	IT5	1	500	\$1.23	Age & price
7.	IT1	1	1,000	\$1.20	Age
8.	IT6	0	400	\$1.30	Random
9.	IT3	0	400	\$1.30	Random
10.	SI1	0	5,000	\$1.25	4th priority for
					SI (transaction
					value)
11.	SI2	0	2,000	\$1.30	Transaction
					values

If Participant A has only 3,500 stock X in its Stock Clearing Account at the time of the Batch-settlement-run (instead of 16,000), full settlement of IT7 and CNS1 will be effected and a partial settlement of the CNS2 will be effected.

If there are only 7,000 stock X available in Participant A's Stock Clearing Account at the time of the Batch-settlement-run, settlement of IT7, CNS1, CNS2, IT4 and IT2 will be effected. The remaining 300 stock X in Participant A's Stock Clearing Account will not be used to settle the other outstanding delivery positions as partial delivery is not allowed for Isolated Trades and SI/ISI Transactions included in a Batch-settlement-run.

If instead 7,100 stock X were available, the remainder of 400 stock X in Participant A's Stock Clearing Account following settlement of IT7, CNS1, CNS2, IT4 and IT2, would then be used to settle IT6 (in preference to IT5 and IT1, as no partial settlement of Isolated Trades is allowed in a Batch-settlement-run).

# (b) Example (delivery - settlement sequence for SI transactions, with reference to the processing schedule for Eligible Securities other than China Connect Securities)

Participant A has the following delivery positions of SI Transactions in stock X to be settled in a Batch-settlement-run on S-day.

Transaction	Due Date of Settlement	Age	Transaction Quantity	Transaction Value	Time of Matching
SI1	S-4	4	1,000	\$1,100	11:30 a.m. on S-1
SI2	S-2	2	1,000	\$1,100	11:30 a.m. on S-2
SI3	S-2	1	1,000	\$3,000	2:30 p.m. on S-1
SI4	S-1	1	1,000,000,000	\$1,200,000,000	11:30 a.m. on S-1
SI5	S-1	1	1,500,000,000	\$2,000,000,000	2:30 p.m. on S-1

SI6	S-1	1	1,000 \$2,50	00	11:30 a.m. on S-1
SI7	S-1	1	5,000	60	11:30 a.m. on S-1
SI8	S-1	1	7,000	60	11:30 a.m. on S-1
SI9	S	0	1,000 \$1,20	00	11:30 a.m. on S-1
SI10	S	0	3,000 \$5,00	00	11:30 a.m. on S-1
SI11	S	0	4,500 \$4,50	00	2:30 p.m. on S-1
SI12	S	0	4,000 \$3,00	00	11:30 a.m. on S-1
SI13	S	0	4,100 \$3,10	00	2:30 p.m. on S-1
SI14	S	0	5,000	60	2:30 p.m. on S-1
SI15	S	0	6,000	60	2:30 p.m. on S-1
SI16	S	0	5,000	60	11:30 a.m. on S-1
SI17	S	0	1,200,000,000	60	2:30 p.m. on S-1
SI18	S	0	1,100,000,000	60	11:30 a.m. on S-1

Based on the processing sequence described in Section 13.3.4, the settlement sequence in respect of the delivery positions of Participant A in stock X will be:

Settlement Order	Transaction	Age	Transaction Quantity	Transaction Value	Reasons
1.	SI4	1	1,000,000,000	\$1,200,000,000	Overdue, DVP, highest transaction value, earlier matching time
2.	SI5	1	1,500,000,000	\$2,000,000,000	Overdue, DVP, highest transaction value, later matching time
3.	SI3	1	1,000	\$3,000	Overdue, DVP, 2nd highest transaction value
4.	SI6	1	1,000	\$2,500	Overdue, DVP, 3rd highest transaction value
5.	SI2	2	1,000	\$1,100	Overdue, DVP, 4th highest transaction value, earlier matching time
6.	SI1	4	1,000	\$1,100	Overdue, DVP, 4th highest transaction value, later matching time
7.	SI8	1	7,000	\$0	Overdue, FOP, highest transaction quantity
8.	SI7	1	5,000	\$0	Overdue, FOP, 2nd highest transaction quantity
9.	SI10	0	3,000	\$5,000	Due, DVP, highest transaction value
10.	SI11	0	4,500	\$4,500	Due, DVP, 2nd highest transaction

11.	SI12	0	4,000	\$3,000	value Due, DVP, 3rd highest transaction value, earlier
12.	SI13	0	4,100	\$3,100	matching time Due, DVP, 3rd highest transaction value, later matching
13.	SI9	0	1,000	\$1,200	time Due, DVP, 4th highest transaction value
Settlemen Order	t Transaction	Age	Transaction Quantity	Transaction Value	Reasons
14.	SI18	0	1,100,000,000	\$0	Due, FOP, highest transaction quantity, earlier matching time
15.	SI17	0	1,200,000,000	\$0	Due, FOP, highest transaction quantity,
16.	SI15	0	6,000	\$0	later matching time Due, FOP, 2 <sup>nd</sup> highest transaction
17.	SI16	0	5,000	\$0	quantity Due, FOP, 3 <sup>rd</sup> highest transaction quantity, earlier
18.	SI14	0	5,000	\$0	matching time Due, FOP, 3 <sup>rd</sup> highest transaction

# 13.3.6 Receipt - processing sequence of long positions

HKSCC will allocate Eligible Securities made available by delivering Participants and, in the case of China Connect Securities, by delivering China Connect Clearing Participants and the China Connect Clearing House, to Participants with long CNS stock positions in a Batch-settlement-run based on a pre-determined algorithm (see Section 13.4).

Except for CNS stock positions, other transactions included in a Batch-settlement-run (i.e. Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions) will be settled on a trade-for-trade basis. Accordingly, there is no processing sequence as such and Participants to Isolated Trades (including Clearing Agency Transactions), ISI Transactions and SI Transactions will receive Eligible Securities in a Batch-settlement-run (or after payment is confirmed from the Clearing House of HKAB in the case of RDP transactions) as and when their counterparty Participants settle delivery stock positions included in a Batch-settlement-run.

# 13.4 ALLOCATION ALGORITHM FOR LONG CNS STOCK POSITIONS

# 13.4.1 Allocation algorithm

For each Eligible Security, upon receipt of Eligible Securities from Participants and, in the case of China Connect Securities, the relevant China Connect Clearing House and China Connect Clearing Participants, with short CNS stock positions (whether by DIs or as a result of Batch-settlement-runs) HKSCC will allocate such Eligible Securities to the Stock Clearing Accounts of Participants with long CNS Stock positions based on the following allocation algorithm:

- (i) age (oldest) the long CNS stock position which has remained unsettled for the longest period of time; and if this is the same for two CNS stock positions, then
- (ii) position price (highest) the long CNS stock position which has the highest position price (i.e. position amount divided by position quantity); and if this is the same for two CNS stock positions, then
- (iii) position size (smallest) the long CNS position which has the smallest position size (i.e. quantity); and if this is the same for two CNS stock positions, then
- (iv) random.

At any time, one Participant may have received partial delivery in respect of its long CNS stock position in a particular Eligible Security.

# 13.4.2 Example (Allocation algorithm for CNS long stock positions)

Participants A, B and C have the following long CNS stock positions in stock X on S-day:

Participant	Due day of settlement	Age	Position	Position price
A	S-1	1	1,000	\$1.2
В	S-2	2	600	\$1.0
	S	0	400	\$1.3
C	S-2	2	100	\$1.0
	S-1	1	500	\$1.0
	S	0	400	\$1.3
			<u>3,000</u>	

The order of allocation by HKSCC if 3,000 stock X are available will be :

Allocation order	Participant	Age	Position Price	Position	Reason(s)
1	C	2	\$1.0	100	Age & size
2	В	2	\$1.0	600	Age
3	A	1	\$1.2	1,000	Age & price
4	C	1	\$1.0	500	Age
5	В	0	\$1.3	400	Random

If only 2,800 stock X are available for allocation by HKSCC, Participant C will receive 200 stock X only in respect of its CNS stock position of 400 due on S-day.

## 13.5 ENQUIRIES AND REPORTS

CCASS provides reports and statements and on-line enquiry to assist Participants to prepare for settlement and to control and reconcile transactions effected.

Details of the enquiry services and the reports and statements which are available are listed in Sections 15 and 16.

#### 13.6 CANCELLING STOCK POSITIONS

## 13.6.1 Eligible Securities becoming non-eligible

Stock positions may remain unsettled in CCASS. This may arise as a result of Eligible Securities becoming non-eligible (e.g. as a result of delisting from the Exchange), the termination of participation of a Participant, or for other reasons. This Section explains how such unsettled stock positions, arising out of transactions accepted for settlement in CCASS, may be cancelled by HKSCC.

For the avoidance of doubt, the cancellation of stock positions in CCASS by HKSCC will not on its own affect the rights and liabilities of the Participants affected.

In relation to the CNS System, it is unlikely that there will be unsettled CNS stock positions as a result of Eligible Securities becoming non-eligible. Normally, Exchange Trades in an Eligible Security which will become non-eligible will no longer be accepted for settlement under the CNS System with effect from six Settlement Days before the last trading day of such Eligible Securities (on the Exchange, if applicable). In the unlikely event of there being unsettled CNS stock positions following an Eligible Security becoming non-eligible, HKSCC will follow up with the Participants concerned.

In relation to the Isolated Trades System, Participants having unsettled stock positions as a result of Eligible Securities becoming non-eligible will have to follow up with one another in order to cancel unsettled stock positions in CCASS.

To cancel unsettled stock positions under the CNS System and the Isolated Trades System, the Participants concerned will have to complete and return an application to cancel the settlement position (see CCASS Terminal User Guide for Participants for the form) to HKSCC. In the case of an unsettled stock position under the Isolated Trades System, both counterparty Participants will have to apply jointly to HKSCC. HKSCC reserves the right to cancel such unsettled stock positions in CCASS if the Participants concerned fail to apply for cancellation of such stock positions after a period of time (to be decided by HKSCC on a

case by case basis) from the date the relevant Eligible Security becomes non-eligible.

Unsettled SI Transactions with matched status or matched on-hold status will be purged from CCASS fourteen calendar days after the stipulated Settlement Day while unmatched or pending SIs will be purged from CCASS fourteen calendar days after input, provided that if the fourteenth calendar day is not a Business Day, unsettled and unmatched or pending SIs will be purged from CCASS on the Business Day immediately preceding the fourteenth calendar day. Further, Participants may themselves make use of the "Revoke Matched SI" function to cancel SI stock positions.

ISI with pending for settlement status will be purged from CCASS fourteen calendar days after the stipulated settlement day (or if the fourteenth calendar day falls on a day which is not a Business Day, the immediately preceding Business Day). Unaffirmed ISIs (with affirmation) and pending ISIs, will be purged from CCASS fourteen calendar days after input. Further, Participants other than Investor Participants may make use of the "Delete ISI" function to cancel such unaffirmed ISIs (with affirmation) and pending ISIs.

## 13.6.2 Termination of participation of a Participant

In the event of termination of participation of a Participant in CCASS, HKSCC may on its own accord cancel unsettled stock positions of such Participants as well as the related stock positions of the relevant counterparty Participants, if any.

#### 13.6.3 Others

In the other cases, Participants may also apply to HKSCC to cancel unsettled stock positions and this will be subject to the approval of HKSCC. HKSCC also reserves the rights to cancel unsettled stock positions after a period of time (to be decided by HKSCC on a case by case basis).