Changes in relation to the decommissioning of smartcard authentication for Terminal access to CCASS are shaded in orange for ease of reference.

Getting Started For Terminal Operations

ACCESS CONTROL

INTRODUCTION:

This section details the access control of CCASS. The account maintenance of the delegated administrators (DAs) of the Participants including assignment of DAs' user ID is centralised and administered by HKSCC, while the DAs are responsible for maintaining the user profile of the users, including the assignment of their users' user IDs. Please refer to section 3.2 on Security Management.

Access controls are implemented to ensure that only relevant CCASS information is accessible to authorised users (users). It is achieved through the following elements:

- Two-Factor Authentication (2FA)
- Smartcard (applicable to Participant Gateway (PG) users only)
- participant ID
- user profile, which includes:
    - user ID
    - user access level assignment
    - input transaction limit
- IP address
- inactivity timeout

1. Two-Factor Authentication (2FA)

A Participant may delegate his CCASS operations to a number of users. To establish a new user, a Participant will need to apply to HKSCC by submitting the eService Form – DA 4 "CCASS / CCMS User Account Application Form" (as stated under "HKEX Website"). It should be noted that each user account is unique to that assigned user, and cannot be shared by other users or Participants.

All users and DAs should access to CCASS by 2FA. Each user and DA of the Participant must logon CCASS Terminal by their user ID, password and One-Time-Password (OTP) obtained from the designated channel (i.e. mobile application or email).

Users and DAs must initialise 2FA by setting up a password according to the HKEX Password Policy and the designated channel to obtain OTP when he/she first logs on CCASS through the CCASS Terminal. For details, please refer to Section 3.4 on LOGON AND LOGOFF CCASS.

User's access will be locked after 5 consecutive unsuccessful attempts of login within 30 minutes, while 3 consecutive unsuccessful attempts of entering OTP will be counted as 1 unsuccessful attempt of login. Please refer to Section 3.6 on ACCOUNT MAINTENANCE.

2. Smartcard (applicable to Participant Gateway (PG) users only):

Participant who access to CCASS through PG should access to CCASS by smartcard, and must insert his/her smartcard into the smartcard reader connecting to PG and input a correct smartcard password in order to logon to CCASS.

3. Participant ID:

Participant ID is assigned by HKSCC when the Participant is admitted to CCASS. It is a six-character code beginning with a character (e.g. B12345). The leading character indicates the Participant nature (B for Clearing Participants which are also Exchange Participants of SEHK; A for Clearing Agency Participants, C for Custodian Participants / Clearing Participants which are not Exchange Participants of SEHK, e.g. registered institutions; L for Stock Lender Participants; P for Stock Pledgee Participants; and numeric number for investor).

4. User ID:

A unique user ID is assigned for each user and DA of a Participant, HKSCC shall assign user ID for each DA of the Participant, while DAs shall assign user ID for their users. It is an eight-character code (e.g. B1234501), of which the first six characters are identical to the Participant ID. HKSCC has the right to suspend or delete any user ID of a Participant.

5. User Access Level Assignment:

Users can only access CCASS functions that they are authorised to access. HKSCC has defined user access levels by function availability: each user level can access a different set of CCASS functions. For example, users in some user levels (e.g. operators as makers) can access only the data entry functions while users in other user levels (e.g. managers as checkers) can access the authorisation and enquiry functions. This helps the Participant to achieve internal control.

For simplicity, user groups A, C, D, E, F, G, H, I, J, K, L, M, N, O, AA, AB, AC and AD are defined for general CCASS functions; P, Q, S, T, U, W and X are defined for Common Collateral Management System (CCMS) functions; 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and 28 are defined for upload batch file functions; and EE is defined for Security Management functions (refer Table 3.1.1). Participants are recommended to assign appropriate combinations of the user groups to each of the users as his/her user access level, by considerating segregation of duties for internal control.

TABLE 3.1.1

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Enquire Broadcast Message	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Report Download		✓																
Report Profile Maintenance		✓																
DELIVERY INSTRUCTION																		
Input DI							✓		✓									
Change DI Requirement							✓		✓									
CASH PREPAYMENT / TSF PAYMENT																		
Add Cash Prepayment Instruction	✓																	
Change Cash Prepayment Instruction	✓																	
Delete Cash Prepayment Instruction	✓																	
Authorise Cash Prepayment Instruction							✓											
Revoke Cash Prepayment Instruction							✓											
Enquire Cash Prepayment Instruction	✓						✓											
Add Cash Prepayment for China Connect Markets	✓																	
Change Cash Prepayment for China Connect Markets	✓																	
Delete Cash Prepayment for China Connect Markets	✓																	
Authorise Cash Prepayment for China Connect Markets							✓											
Revoke Cash Prepayment for China Connect Markets							✓											
Enquire Cash Prepayment for China Connect Markets	✓						✓											
Add Cash Prepayment / TSF Payment Standing Instruction	✓																	
Change Cash Prepayment / TSF Payment Standing Instruction	✓																	
Delete Cash Prepayment / TSF Payment Standing Instruction	✓																	
Authorise Cash Prepayment / TSF Payment Standing Instruction							✓											

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Cancel Cash Prepayment / TSF Payment Standing Instruction							✓											
Enquire Cash Prepayment / TSF Payment Standing Instruction	✓						✓											
Add Cash Prepayment Standing Instruction for China Connect Markets	✓																	
Change Cash Prepayment Standing Instruction for China Connect Markets	✓																	
Delete Cash Prepayment Standing Instruction for China Connect Markets	✓																	
Authorise Cash Prepayment Standing Instruction for China Connect Markets							✓											
Cancel Cash Prepayment Standing Instruction for China Connect Markets							✓											
Enquire Cash Prepayment Standing Instruction for China Connect Markets	✓						✓											
SETTLEMENT INSTRUCTION (SI)																		
Input SI	✓																	
Change SI	✓																	
Delete SI							✓											
Authorise Pending SI							✓											
Revoke Matched SI							✓											
Change Hold Matched SI							✓											
Change Matched/Settled SI							✓											
Enquire SI	✓						✓											
Enquire Deleted SI	✓						✓											
Enquire Unmatched SI Reason	✓						✓											
Add SI Tolerance Limit	✓																	
Delete SI Tolerance Limit	✓																	
Authorise SI Tolerance Limit							✓											
Cancel SI Tolerance Limit							✓											
Enquire SI Tolerance Limit	✓						✓											
A/C TRANSFER INSTRUCTION (ATI)																		

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Input ATI						✓												
Input Mass ATI / STI						✓												
Change Mass ATI / STI						✓												
Delete Mass ATI / STI						✓												
Enquire Mass ATI / STI						✓												
STOCK SEGREGATED ACCOUNT TRANSFER INSTRUCTION (STI)																		
Add STI								✓										
Change STI								✓										
Delete STI								✓										
Enquire STI								✓	✓									
Authorize STI									✓									
Revoke STI									✓									
INVESTOR SETTLEMENT INSTRUCTION (ISI)																		
Input ISI								✓										
Change ISI								✓										
Delete ISI									✓									
Authorise Pending ISI									✓									
Enquire ISI								✓	✓									
Hold / Release ISI									✓									
LOGIN WITHDRAWAL ORDER																		
Add Login Withdrawal Order	✓																	
Change Login Withdrawal Order	✓																	
Delete Login Withdrawal Order	✓																	
Enquire Login Withdrawal Order	✓		✓															
Authorise Login Withdrawal Order			✓															
Cancel Login Withdrawal Order			✓															
ELECTION INSTRUCTION																		
Change Election Instruction				✓														
Enquire Election Instruction				✓	✓													
Authorise Election Instruction				✓														
SUBSCRIPTION INSTRUCTION																		
Add Subscription Instruction				✓														
Change Subscription Instruction				✓														

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Delete Subscription Instruction				✓														
Enquire Subscription Instruction				✓	✓													
Cancel Subscription Instruction				✓														
Authorise Subscription Instruction				✓														
CORPORATE VOTING INSTRUCTION																		
Change Corp Voting Instruction				✓														
Enquire Corp Voting Instruction				✓	✓													
Authorise Corp Voting Instruction				✓														
Enquire SSA Corporate Voting Instruction				✓	✓													
Enquire Resolution Description				✓	✓													
Add Corp Rep. / Proxy				✓														
Change Corp Rep. / Proxy				✓														
Delete Corp Rep. / Proxy				✓														
Authorise Corp Rep. / Proxy					✓													
Enquire Corp Rep. / Proxy				✓	✓													
SHAREHOLDING CATEGORY DISCLOSURE																		
Add Shareholding Category Disclosure				✓														
Change Shareholding Category Disclosure				✓														
Delete Shareholding Category Disclosure				✓														
Authorise Shareholding Category Disclosure					✓													
Enquire Shareholding Category Disclosure				✓	✓													
CA ISO MESSAGE SERVICE SUBSCRIPTION																		
Add ISO Message Subscription				✓														
Change ISO Message Subscription				✓														
Delete ISO Message Subscription				✓														
Authorise ISO Message Subscription					✓													
Enquire ISO Message Subscription				✓	✓													
SBL BULLETIN BOARD																		
Add Stock Borrowing Request	✓																	
Change Stock Borrowing Request	✓																	
Delete Stock Borrowing Request	✓																	

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Enquire Stock Borrowing Request	✓	✓																
Enquire Stock Lender List	✓	✓																
Enquire Stock Borrowing List	✓	✓																
CORPORATE COMMUNICATION																		
Add Recipient Master				✓														
Change Recipient Master				✓														
Delete Recipient Master				✓														
Enquire Recipient Master				✓														
Add Event Recipient List				✓														
Delete Event Recipient List				✓														
Enquire Event Recipient List				✓														
Enquire Corporate Communications Event				✓														
PAYMENT INSTRUCTION																		
Enquire Payment Instruction		✓																
Enquire TSF Payment Instruction		✓																
Add Intra-day Payment Standing Instruction	✓			✓														
Change Intra-day Payment Standing Instruction	✓			✓														
Delete Intra-day Payment Standing Instruction	✓			✓														
Authorise Intra-day Payment Standing Instruction					✓		✓											
Cancel Intra-day Payment Standing Instruction					✓		✓											
Enquire Intra-day Payment Standing Instruction	✓			✓	✓		✓											
Enquire Intra-day Payment Summary	✓			✓	✓		✓											
Add Nominee Payment (Evening) Standing Instruction	✓			✓														
Change Nominee Payment (Evening) Standing Instruction	✓			✓														

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Delete Nominee Payment (Evening) Standing Instruction	✓			✓														
Authorise Nominee Payment (Evening) Standing Instruction					✓		✓											
Cancel Nominee Payment (Evening) Standing Instruction					✓		✓											
Enquire Nominee Payment (Evening) Standing Instruction	✓			✓	✓		✓											
HIDE UNMATCHED SI CONTENT COUNTEPARTY LIST																		
Input Hide Unmatched SI Content Counterparty List	✓																	
Delete Hide Unmatched SI Content Counterparty List	✓																	
Authorise Hide Unmatched SI Content Counterparty List							✓											
Cancel Hide Unmatched SI Content Counterparty List							✓											
Enquire Hide Unmatched SI Content Counterparty List	✓						✓											
ISI (WITH AFFIRMATION) COUNTERPARTY LIST																		
Input ISI (With Affirmation) Counterparty List										✓								
Delete ISI (With Affirmation) Counterparty List										✓								
Authorise ISI (With Affirmation) Counterparty List											✓							
Cancel ISI (With Affirmation) Counterparty List											✓							
Enquire ISI (With Affirmation) Counterparty List										✓	✓							
ISI (WITHOUT AFFIRMATION) COUNTERPARTY LIST																		
Input ISI (Without Affirmation) Counterparty List															✓			

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Delete ISI (Without Affirmation) Counterparty List															✓			
Authorise ISI (Without Affirmation) Counterparty List																✓		
Cancel ISI (Without Affirmation) Counterparty List																✓		
Enquire ISI (Without Affirmation) Counterparty List															✓	✓		
ENQUIRE SETTLEMENT ACT / STATUS																		
Enquire Due/Overdue Position		✓																
Enquire Stock Account Balance		✓																
Enquire Stock Account Movement		✓																
Enquire Settlement Activity		✓																
Enquire Money Position / Instruction		✓																
GENERAL ENQUIRIES																		
Enquire Announcement Information	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓						
Enquire Participant List	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
Enquire Stock List	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓						
Enquire Reported Lost Certificate		✓																
Enquire Buy-in Confirmation	✓						✓	✓	✓									
Enquire NCP/GCP Mapping		✓																
Enquire Issuer Announcement	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓						
STOCK BORROWING/LENDING																		
Input Recall Request												✓						
Change Cash Compensation Indicator												✓						
Enquire Lending Position		✓										✓						
Enquire Stock Borrowing Information		✓										✓						
UNIT ORDER																		
Add Cash Creation Order													✓					
Change Cash Creation Order													✓					

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Delete Cash Creation Order													✓					
Authorise Cash Creation Order														✓				
Enquire Cash Creation Order													✓	✓				
Add In Kind Creation Order													✓					
Change In Kind Creation Order													✓					
Delete In Kind Creation Order													✓					
Authorise In Kind Creation Order														✓				
Enquire In Kind Creation Order													✓	✓				
Add Redemption Order													✓					
Change Redemption Order													✓					
Delete Redemption Order													✓					
Authorise Redemption Order														✓				
Enquire Redemption Order													✓	✓				
Add ETF Book-entry Deposit and Withdrawal Order													✓					
Delete ETF Book-entry Deposit and Withdrawal Order													✓					
Authorise ETF Book-entry Deposit and Withdrawal Order														✓				
Enquire ETF Book-entry Deposit and Withdrawal Order													✓	✓				
TENDER INSTRUCTION																		
Add Tender Instruction				✓														
Change Tender Instruction				✓														
Delete Tender Instruction				✓														
Authorise Tender Instruction					✓													
Cancel Tender Instruction					✓													
Enquire Tender Instruction				✓	✓													
Enquire Authorised Tender Announcement				✓	✓													
Enquire Tender Result				✓	✓													
STOCK SEGREGATED ACCOUNT WITH STATEMENT SERVICE (SSA) MASTER																		
Add SSA																	✓	
Change SSA																	✓	
Delete SSA																	✓	
Enquire SSA																	✓	✓

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Reset SSA Primary Password																		✓
Add SSA Bank Account																	✓	
Change SSA Bank Account																	✓	
Delete SSA Bank Account																	✓	
Enquire SSA Bank Account																	✓	✓
STOCK RELEASE REQUEST																		
Add Stock Release Request	✓																	
Change Stock Release Request	✓																	
Delete Stock Release Request	✓																	
Authorize Stock Release Request						✓												
Enquire Stock Release Request	✓					✓												
SPSA DELIVERY FAILURE MAINTENANCE																		
Add Sellable Balance Adjustment Request	✓																	
Change Sellable Balance Adjustment Request	✓																	
Delete Sellable Balance Adjustment Request	✓																	
Authorise Sellable Balance Adjustment Request							✓											
Cancel Sellable Balance Adjustment Request							✓											
Enquire Sellable Balance Adjustment Request	✓						✓											
INTER-COUNTER TRANSFER/CONVERSION INSTRUCTION																		
Input Inter-counter Transfer/Conversion Instruction						✓												
Cancel Inter-counter Transfer/Conversion Instruction						✓												
Enquire Inter-counter Transfer/Conversion Instruction						✓												
INTRADAY COUNTER TRANSFER STANDING INSTRUCTION																		
Add Intraday Counter Trf Standing Inst	✓																	
Chg Intraday Counter Trf Standing Inst	✓																	
Del Intraday Counter Trf Standing Inst	✓																	
Auth Intraday Counter Trf Standing Inst							✓											

GENERAL CCASS FUNCTION	USER ACCESS LEVEL CODE																	
	A	C	D	E	F	G	H	I	J	K	L	M	N	O	AA	AB	AC	AD
Rev Intraday Counter Trf Standing Inst							✓											
Enq Intraday Counter Trf Standing Inst	✓						✓											
INTRADAY COUNTER TRANSFER INSTRUCTION																		
Add Intraday Counter Transfer Inst	✓																	
Delete Intraday Counter Transfer Inst	✓																	
Authorise Intraday Counter Transfer Inst							✓											
Revoke Intraday Counter Transfer Inst							✓											
Enquire Intraday Counter Transfer Inst	✓						✓											
Multi-counter Settlement Mapping																		
Enquire Multi-counter Settlement Mapping	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓						

'✓' means the user has the access right to the functions.

M means only CCASS Participants with Stock Borrowing / Lending Account can apply the user access level.

CCMS FUNCTIONS	USER ACCESS LEVEL CODE						
	P	**Q**	**S**	**T**	**U**	**W**	**X**
GENERAL FUNCTIONS							
Enquire Broadcast Message	✓	✓	✓	✓	✓		
CCMS STOCK TRANSFER							
Add CCASS-To-CCMS Stock Transfer	✓						
Add CCMS-To-CCASS Stock Transfer					✓		
Add General To Specific Stock Collateral		✓					
Add Specific To General Stock Collateral				✓			
SPECIFIC CASH COLLATERAL							
Add Pending Specific Cash Collateral						✓	
Delete Pending Specific Cash Collateral						✓	
Authorise Pending Specific Cash Collateral							✓
Enquire Specific Cash Collateral						✓	✓
PREFERRED SINGLE SETTLEMENT CURRENCY							
Change Preferred Single Settlement Currency						✓	
Delete Pending Preferred Single Settlement Currency						✓	
Authorise Pending Preferred Single Settlement Currency							✓
Enquire Preferred Single Settlement Currency						✓	✓
ENQUIRE COLLATERAL INFORMATION							
Enquire Collateral Account Balance			✓				
Enquire Collateral Account Movement			✓				
Enquire Collateral Inventory			✓				
Enquire Interest Calculation Result			✓				
Enquire Currency Exchange Rate and Haircut			✓				
Enquire Coll Effective Haircut & Val Price			✓				
Enquire Specific Cash Collateral Movement			✓				

'✓'　means the user has the access right to the functions.

Clearing Participants may need to access some or all of the functions defined under the above CCMS user groups.
Custodian Participants only need to access those functions defined under user group S.

SECURITY MANAGEMENT FUNCTIONS	USER ACCESS LEVEL CODE
	EE
SECURITY MANAGEMENT	
Enquire User Profile	✓
View User Group Listing (with accessible C/3 functions)	✓
View User Profile Listing	✓
View Disabled User Listing	✓
View User Profile Maintenance Report	✓

'✓'   means the user has the access right to the functions.

UPLOAD BATCH FILE FUNCTIONS	USER ACCESS LEVEL CODE																	
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
UPLOAD BATCH FILE																		
SI Batch File Upload	✓																	
Authorise SI Batch File Upload		✓																
ISI Batch File Upload			✓															
Authorise ISI Batch File Upload				✓														
ATI Batch File Upload					✓													
Authorise ATI Batch File Upload						✓												
Corporate Communication Recipient Batch File Upload							✓											
Authorise Corporate Communication Recipient Batch File Upload								✓										
Corporate Representative/Proxy Batch File Upload									✓									
Authorise Corporate Representative/Proxy Batch File Upload										✓								
Tender Instruction Batch File Upload													✓					
Authorise Tender Instruction Batch File Upload														✓				
SSA Batch File Upload															✓			
Authorize SSA Batch File Upload																✓		
STI Batch File Upload			✓															
Authorise STI Batch File Upload				✓														
Multi-counter Transfer Instruction Batch File Upload					✓													
Authorise Multi-counter Transfer Instruction Batch File Upload						✓												
Parallel Trading Conversion Instruction Batch File Upload					✓													
Authorise Parallel Trading Conversion Instruction Batch File Upload						✓												
Specific Stock Collateral Batch File Upload																	✓	
Authorise Specific Stock Collateral Batch File																		✓
GENERAL ENQUIRIES																		
Enquire Announcement Information	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Enquire Participant List	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Enquire Stock List	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
Enquire Broadcast Message	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				

'✓'   means the user has the access right to the functions.

Based on the above predefined user groups, a combination of user access levels can be worked out for the users of a Participant. Note that if a user attempts to select a function which he does not have the right to access, an error message will be displayed by the system.

5. Input Transaction Limits:

For CCASS input functions (i.e. INPUT SI, CHANGE SI, DELETE SI, AUTHORISE PENDING SI, CHANGE MATCHED/SETTLED SI, CHANGE HOLD MATCHED SI, REVOKE MATCHED SI, INPUT ISI, CHANGE ISI, DELETE ISI, AUTHORISE PENDING ISI, HOLD/RELEASE ISI, INPUT ATI, INPUT DI, CHANGE DI REQUIREMENT, INPUT RECALL REQUEST, CHANGE CASH COMPENSATION INDICATOR, ADD CASH PREPAYMENT INSTRUCTION, CHANGE CASH PREPAYMENT INSTRUCTION, DELETE CASH PREPAYMENT INSTRUCTION, AUTHORISE CASH PREPAYMENT INSTRUCTION and REVOKE CASH PREPAYMENT INSTRUCTION, INPUT INTER-COUNTER TRANSFER/CONVERSION INSTRUCTION), DA of the Participants can specify the input transaction limit of their authorised users via USER PROFILE MAINTENANCE functions. Please refer to section 8.4.1 for details.

The transaction limit is calculated on the higher of input value and market value (based on the nominal price of the stock of the previous trading day) of stock; i.e. if no dollar amount is entered, the transaction limit will be calculated on market value. However, if dollar value is entered, when comparing market value with input value, transaction limit will be counted on the higher of the value. Therefore, with the exception of INPUT SI, INPUT ISI, CHANGE SI, CHANGE ISI, ADD CASH PREPAYMENT INSTRUCTION and CHANGE CASH PREPAYMENT INSTRUCTION, CCASS will not accept transaction entered or updated by users if the input dollar amount of the transaction or the market value of the quantity of stock is higher than the authorised transaction limit of the user. For INPUT SI, INPUT ISI, CHANGE SI, CHANGE ISI, ADD CASH PREPAYMENT INSTRUCTION and CHANGE CASH PREPAYMENT INSTRUCTION, the said transaction will still be captured by CCASS but under the pending for authorisation status.

The transaction limit can be set in HKD only. The input value and market value of the stock in foreign currency will be converted into HKD equivalent for comparison with the transaction limit.

6. IP address :

HKSCC maintains IP addresses of the PCs that the Participants will be used to access CCASS and will deny access attempt from PCs with unrecognised IP addresses.

7. Inactivity timeout:

CCASS is automatically logged off if the user or DA does not operate at the terminal for a certain time period (about 15 minutes). To access CCASS again, the user or DA has to close the browser and perform the logon procedures. This prevents other unauthorized persons from using the CCASS Terminal if the user or DA forgets to logoff from CCASS. Please refer to Section 3.4 for further details on inactivity timeout.

8. Participants' security responsibility

Each Participant is responsible for establishing and informing HKSCC of subsequent changes to the list of authorised signatories to approve various request forms regarding CCASS DAs and other matters in relation to CCASS access.

It is the responsibility of each Participant to control access to its CCASS Terminal and to the users' and DAs' designated OTP channel and smartcards (where applicable) to ensure the

security and confidentiality of the user IDs, passwords and smartcard passwords (where applicable) of its assigned users and DAs, to ensure that the users' account are associated with appropriate Access Levels for segregation of duties and its assigned users abide by the Access Levels assigned to each of them, to ensure the security and confidentiality of the Authorisation Code (detailed in Section 3.2) of its DAs, and to ensure that its DAs abide by the Administrator Rights assigned to them.

For 2FA users and DAs, in case of lost of password, they can perform self-service password reset if they have enabled mobile application to obtain OTP, given that their account is not locked. If they have enabled email to obtain OTP, DA should perform Unlock/ Reset OTP Device Registration in DMS for their users to reset password, while Participant shall immediately request HKSCC to Unlock/ Reset OTP Device Registration for its DA by submitting to HKSCC the eService Form – DA 3 "CCASS/ CCMS Delegated Administrator Application/ Maintenance Form" (as stated under "HKEX Website").

For PG users, in case of lost of smartcard, or need to reset smartcard password, Participant has to submit to HKSCC the eService Form – SCard 2 "Smartcard Maintenance for user (PG or Special Request)" (as stated under "HKEX Website").

Participants shall be liable for all instructions input into CCASS via their CCASS Terminals. Participants requiring additional user account must submit to HKSCC the eService Form – DA 4 "CCASS/ CCMS User Account Application Form" (as stated under "HKEX Website"). Participants are required to pay the appropriate fees for additional user account(s) as stipulated in the CCASS OP.