

Section A – Notes to the Application

For Exchange Participants (“EPs”) who choose to install the Backup China Connect Open Gateway at their office should read carefully of the below explanatory notes.

- a. **China Connect Open Gateway (CC OG)** : CC OG is a hardware and software component operated by the EP, which provides the communications interface between the China Stock Connect System (CSC) and Broker Supplied System (BSS).
- b. **Backup China Connect Open Gateway (Backup CC OG)** : Backup CC OG service is to provide an additional contingency arrangement for the trading operations of the EPs, particularly during any site disaster which may lead to the failure of the production CC OG/BSS.
- c. **Backup CC OG Server Hardware Configuration and Software Package** : Backup CC OG will support both standard and high availability (cluster) configurations. HKEX will provide the minimum hardware requirement (see Section C) and third party software packages (see Section D) specification for the CC OG purchased by EP. EP is responsible for procurement of the hardware and software package for the Backup CC OG, liaises with HKEX Appointed Service Vendor to install the software, and arranges with its vendor to install the Backup CC OG at EP’s office.
- d. **CC OG Application** : CC OG application is the application software provided by HKEX for trading purpose. HKEX possesses the ownership of CC OG application and owns the administrative right of the CC OG. HKEX will provide the Windows security policy setup procedure and CC OG application installation procedure to the Appointed Service Vendors. EP is required to contact directly with one of Appointed Service Vendors to install the software. Contact information of Appointed Service Vendors are as follows :

Appointed Service Vendor	Contact Person	Contact No.	Email Address
CL Technical Services Ltd	Mr Roy Lam	22384273 / 90267415	roy.kl-lam@clts.com
	Mr Mike Ko	22384273 / 94229531	mikeko@clts.com
Microware Ltd	Mr Ricky Ma	25654653 / 97225083	rickyma@microware.com.hk
	Ms Haidy Wong	25654557 / 91636325	haidywong@microware.com.hk

When EP terminates the use of Backup CC OG, EP is required to erase the content of Backup CC OG application at its own cost.

- e. **Backup CC OG Maintenance** : EP is responsible for maintenance of the Backup CC OG, direct liaison with its vendor to provide repair service, renewal of maintenance service contract for Backup CC OG hardware & software and various types of maintenance service activities.
- f. **Security Control for Backup CC OG** : Only trading system sign-on will be used for authentication for the Backup CC OG. The sensitive data will still be protected by software encryption throughout the data transmission as well as message authentication will still be achieved by checksum calculation.

- g. Backup CC OG Installation Address** : In order to facilitate business continuity of EPs in case of site disasters leading to the malfunction of the CC OG devices, it is recommended that Backup CC OG(s) to be installed in a location that is physically distant from primary site that hosts the production CC OG(s).
- h. Backup CC OG to Support Production CC OG** : One Backup CC OG can support a single designated production CC OG/BSS (1:1 backup approach). The Backup CC OG will carry the same configuration of production CC OG. The device ID, broker number(s), throttle assignment, Central Trade Feed entitlement and receiving Stock Connect A-Share Market Data Broadcast Message will be same as production CC OG. Please refer to Section E – “Technical Reference of Backup China Connect Open Gateway for Production CC OG/BSS” for details of arrangement.
- i. SDNet/2 Circuit and Network Switch Installation** : A standalone dual circuit with network switch(es) configuration is mandatory for CC OG. EP should directly apply circuits together with network switch(es) from the selected Accredited Vendors. The number of switch to be applied depends on the network configuration and use of EP’s own network switch is not allowed. In addition to circuit installation, EP is also responsible for arranging with SDNet/2 Accredited Vendor directly for quotation and billing arrangement. The contact information of Accredited Vendor and network equipment configuration are set out in [HKEX website](#). EP should ensure the readiness of circuits and network switch(es) prior to installation of CC OG.
- j. Bandwidth Requirement under SDNet/2 and Throttle Rate for Backup CC OG to Support Production CC OG**: 3M bandwidth is required for Backup CC OG receiving both Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE) Market Data information while 2M bandwidth is required for Backup CC OG without receiving Market Data information. Number of throttles assigned to the backup CC OG will be equal to total of throttles assigned to the corresponding production CC OG/BSS, and is limited to 60.
- k. Monthly Fee for Backup CC OG** : The monthly fee is calculated on a full month basis and will be based on number of rolled out Backup CC OG as at the first trading day of each month. A new Backup CC OG roll out on the 2nd trading day or afterwards during the month will be charged the monthly fee in the following month while there will be no refund of the monthly fee of Backup CC OG if termination is made during the month. Please refer to Section B – “Fees and Charges” for details of charges.
- l. Monthly Fee for China Connect Throttle Rate assigned to Backup CCOG** : The monthly fee will be charged base on the number of China Connect throttle rate assigned to Backup CC OG as at the first trading day of each month. The fee is calculated on a full month basis. There will be no adjustment on the movement of China Connect throttle rate assigned to the Backup CCOG during the month. Please refer to Section B – “Fees and Charges” for details of charges.
- m. IP Address Scheme for Backup CC OG/BSS** : To better manage and maintain the CSC trading facilities, a “CSC Device IP Addressing Scheme” (see Section G) has been developed to standardise the IP assignment approach across all BSS broker firms. EPs are required to follow this scheme in assigning the IP address of their CC OG/BSS local network or remote network. For EP who has site specific requirement on network environment, where BSS cannot share the same segment with CC OG and the use of Network Address Translation is not feasible, EP may request to change the CC OG downstream IP address prior to CC OG installation by completing and returning the “CC OG/BSS Downstream IP Address Change Requisition Form” (see Appendix 1 and 2) to the Appointed Service Vendor.
- n. Standard Terms and Conditions** : The Backup China Connect Open Gateway newly purchased directly from Vendor is subject to the Standard Terms and Conditions for China Connect Open Gateways newly purchased directly from Vendor.

Section B – Fees and Charges

Monthly User Fee

Chargeable Item	Amount
Backup CC OG User Fee	HK\$1,250
Each standard China Connect throttle rate assigned to a Backup CC OG	HK\$480

Section C –Backup CC OG Minimum Hardware Requirement

a. Standard CC OG Configuration

The PC server must be certified for Microsoft Windows Server 2008 R2 Standard Edition with the following component requirements:-

- CPU: One Intel ® Xeon E5506 CPU or more powerful model (Quad-core CPU with at least 2.13 GHz clock speed and 4 MB cache). AMD CPUs with the same or better performance figure than the minimum CPU requirement may also be considered.
- Memory: 4 GB DDR3 RAM.
- System Storage: 2x 300GB 10K rpm hard-disk configured in RAID-1 (mirror). Hardware RAID controller is expected.
- Removable media: CD Writer or DVD Writer drive.
- Network interface: Two Gigabit Ethernet adapters.
- Power Supply: Dual power supply units.
- Monitor display: Standard PC monitor.
- Keyboard: Standard 101 keyboard.
- Mouse: Standard PC mouse.

Important Note

- It is the responsibility of EP to consult their respective hardware vendor(s) for configuration advice and seek for on-going maintenance support. Besides, EP should liaise with the appointed service vendor to check for compatibility issue with CC OG applications.

b. High Availability CC OG Configuration

Two identical PC servers and one shared disk storage are configured as 2-node cluster. The PC servers and the shared storage must be certified for Microsoft Windows Server 2008 R2 Enterprise Edition with the following component requirements:-

PC Server

- CPU: One Intel ® Xeon E5506 CPU or more powerful model (Quad-core CPU with at least 2.13 GHz clock speed and 4 MB cache). AMD CPUs with the same or better performance figure than the minimum CPU requirement may also be considered.
- Memory: 4 GB DDR3 RAM.
- System Storage: 2x 300GB 10K rpm hard-disk configured in RAID-1 (mirror). Hardware RAID controller is expected.
- Host Bus Adapters (HBA): Dual HBA (e.g. with Serial Attached SCSI (SAS) or Fibre Channel interface) to match with the shared storage.
- Removable media: CD Writer or DVD Writer drive.
- Network interface: Three Gigabit Ethernet adapters.
- Power Supply: Dual power supply units.
- Monitor display: Standard PC monitor ^(note 1).
- Keyboard: Standard 101 keyboard ^(note 1).
- Mouse: Standard PC mouse ^(note 1).

Note 1 : A single set of monitor display, keyboard and mouse can be shared by the 2 cluster nodes using KVM switch.

Shared (Cluster) Storage

- 2x 300GB 10K rpm hard disk shared storage, configured in RAID-1, with dual controllers (e.g. Serial Attached SCSI or Fibre Channel interface).
- Power Supply: Dual power supply units.

Important Notes:

- The above mentioned hardware configuration for high availability CC OG configuration assumes a dedicated shared storage device for each 2-node cluster setup. HKEX highly recommends EP to follow this basic configuration. However, if EP chooses to share a single external storage among multiple clustered CC OGs, EP is responsible to liaise with their respective hardware vendor(s) to ensure such customised cluster configuration is certified for Microsoft Windows Server 2008 R2 Enterprise Edition. Also, EP should implement appropriate redundancy measure to avoid multiple CC OGs unavailability due to a single external storage failure.
- It is the responsibility of EP to consult their respective hardware vendor(s) for configuration advice and seek for on-going maintenance support. Besides, EP should liaise with the appointed service vendor to check for compatibility issue with CC OG applications.

Section D – Third Party Software Packages for Backup CC OG

a. Standard CC OG Configuration

- One copy of Microsoft Windows Server 2008 R2 Standard Edition.
- One copy of Microsoft Windows Server 2008 Client Access License (CAL)
- One copy of Trend Micro Office Scan V11 anti-virus client software.

b. High Availability CC OG Configuration

- Two copies of Microsoft Windows Server 2008 R2 Enterprise Edition, one for each cluster node.
- One copy of Microsoft Windows Server 2008 Client Access License (CAL)
- Two copies of Trend Micro Office Scan V11 anti-virus client software, one for each cluster node.

Section E – Technical Reference of Backup CC OG for Production CC OG

a. Introduction of Backup CC OG Arrangement

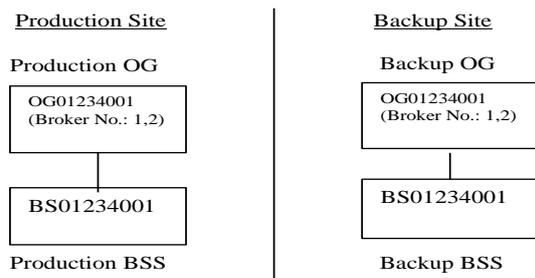
In order to facilitate business continuity of EPs in case of site disasters leading to the malfunction of the production CC OG for trading, HKEX has introduced Backup CC OG arrangement to cope with such situations. EPs who wish to implement Backup CC OG(s) in their backup site must observe installation guidelines as described below. The procedure for activation of Backup CC OG in case of contingency is also explained in this document.

This write-up is applicable to Backup CC OG to backup production CC OG/BSS for trading.

b. Guidelines for Backup CC OG Installation (CC OG/BSS)

1. It is recommended that Backup CC OG(s) be installed in a location that is physically distant from the primary site that hosts the production CC OG(s).
2. BSS users may use one Backup CC OG to support one designated production CC OG (1:1 backup approach).
3. When a Backup CC OG is activated, the connection of production CC OG to CSC will be disconnected. The Backup CC OG will have the same CC OG device ID, the broker number(s) and the throttle associated of the malfunctioned production CC OG. The BSS device ID should be the same as that used for the production CC OG. If Central Trade Feed (CTF) and Stock Connect A-Share Market Data Broadcast Message are enabled on production CC OG, it will also be applied to Backup CC OG.
4. For the Backup CC OG, the BSS user may use HKEX's pre-defined IP address for the BSS LAN interface or provide customized IP address to suit their internal networking requirement. For details, please refer to Section G – "CSC Device IP Addressing Scheme" and Appendix 1 and 2– "Backup CC OG/BSS Downstream IP Address Change Requisition Form".
5. EP must power on Backup CC OG and network switches all the time to allow HKEX to perform regular device health check and software upgrade or else activation of the Backup CC OG may not be possible at any time during emergency situations.
6. While the Backup CC OG is in non-trading mode, HKEX will disable the host access of the Backup CC OG.

Example 1: One Backup OG for one Production OG (1:1 Backup Approach)



Remarks:

1. When the Backup OG is activated, it will have the same device ID OG01234001, same broker nos. 1,2 and same throttle assignment as the production OG.
2. When the Backup OG has been activated, the production OG will be disconnected from AMS host.
3. The switchover of Backup OG remains effective for the whole trading day. Resumption of production OG or change of device ID for the Backup OG within same trading day will not be accommodated once the switchover of Backup OG has taken place.

c. Procedure for Activation of Backup CC OG

When a BSS user encounters production site failure and requires the activation of the backup equipment installed in its disaster recovery site, the EP has to notify HKEX and fax the “Request for Backup CC OG Activation Form” (Appendix 3) to HKEX – Cash Trading for immediate action. The followings are the major steps for activation of Backup CC OG:

Step	Description	By
1.	EP informs HKEX – Cash Trading of the need to activate Backup CC OG. EP has to fill in the “Request for Backup CC OG Activation Form” (Appendix 3) to confirm the CC OG device for which backup activation is required.	EP
2.	HKEX will activate the Backup CC OG. The production CC OGs for which fallback is required will be disabled at CSC.	HKEX
3.	Upon receiving the notification from HKEX of the readiness of the Backup CC OG, EP’s BSS can then initiate connection to the Backup CC OG once it is started up. The Backup CC OG requires 5 to 10 minutes to complete the database download from the CSC after CSC connection is established. The CC OG is then ready to commence trading operation with the BSS.	EP

d. Notes on Reactivation of Production CC OG(s) following the incident reported day

1. The switchover of Backup CC OG/BSS remains effective for the whole trading day of incident reported day only. EP should submit the “Request for Activation of Production CC OG(s) and/or Continuation of Backup CC OG Form” (Appendix 4) to HKEX – Cash Trading no later than 4:00p.m. on incident reported day to confirm the next trading day arrangement.
2. EP may request to conduct a connectivity test (subject to the availability of Saturday session) with CSC after the production site has resumed normal. The connectivity test can be conducted on Saturday at EP’s cost.

Section G – CSC Device IP Addressing Scheme

a. Introduction

This document intends to describe the CC OG/BSS network IP addressing scheme. EPs are required to follow this scheme in assigning the IP addresses to their CC OG/BSS local network or remote network. EPs should maintain the detail records of their current IP address assignment for support and maintenance purposes.

HKEX recommends the first three octets of the IP address to be 192.168.176 (i.e., 192.168.176.*) as these IP addresses are reserved for private use and will not be routed to the Internet even if EPs have mistakenly connected their private LAN segment to their own corporate LAN segment.

It should also be noted that the first octet of the IP address of BSS must NOT be 10 or 172 as these IP addresses are retained for trading network connection (to Host) and the HA CC OG LAN cards interconnection.

The 4th octet of the IP address classified connecting devices as follows:

- CC OG : 192.168.176.1 – 127
- BSS : 192.168.176.128 – 254

The following sections explain the IP address assignment for CC OG and BSS.

b. CC OG

Two IP addresses are allocated for each CC OG. One is used for trading network connection (to CSC) while the other is utilized for BSS LAN connection in EP office. The IP address for trading network connection (to CSC) is defined by HKEX and is referred to as upstream IP address.

CC OG IP address for connection to BSS is referred to as downstream IP address and its default IP address assignment is defined below:

CC OG IP address is within 192.168.176.1 – 127 (with default subnet mask equal to 255.255.255.0). This IP address range can accommodate up to 127 standard CC OGs or 36 HA CC OGs. Alternatively, EPs may request to define their own CC OG IP addresses to suit their business needs.

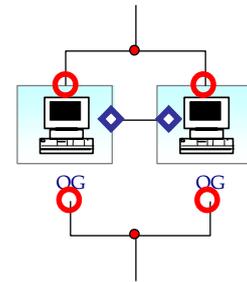
- For HA configuration, the virtual IP address and the 2 physical IP addresses for connection to BSS are assigned in a consecutive manner. IP addresses with the last octet set to multiple of tens are reserved (e.g. 192.168.176.10, 192.168.176.20, 192.168.176.30 and etc. are reserved). Interconnection (cluster heartbeat connection) between two HA server nodes are cross-cable connected.

The example below demonstrates the possible IP address assignment for HA CC OG configuration.

Example 1

- virtual IP address is defined as :
 - 192.168.176.1.
- physical IP addresses are specified to be:
 - 192.168.176.2.
 - 192.168.176.3.
- interconnection LAN card IP addresses are enumerated as:
 - 172.16.1.1.
 - 172.16.1.2.

HA Configuration



- Virtual IP Address
- Physical IP Address
- ◇ Interconnection LAN IP Address

Example 2

- virtual IP address is defined as :
 - 192.168.176.4.
- physical IP addresses are specified to be:
 - 192.168.176.5.
 - 192.168.176.6.
- interconnection LAN card IP addresses are enumerated as:
 - 172.16.1.1.
 - 172.16.1.2.

Example 3

- virtual IP address is defined as :
 - 192.168.176.7.
- physical IP addresses are specified to be:
 - 192.168.176.8.
 - 192.168.176.9.
- interconnection LAN card IP addresses are enumerated as:
 - 172.16.1.1.
 - 172.16.1.2.

Example 4

- virtual IP address is defined as :
 - 192.168.176.11.
- physical IP addresses are specified to be:
 - 192.168.176.12.
 - 192.168.176.13.
- interconnection LAN card IP addresses are enumerated as:
 - 172.16.1.1.
 - 172.16.1.2.

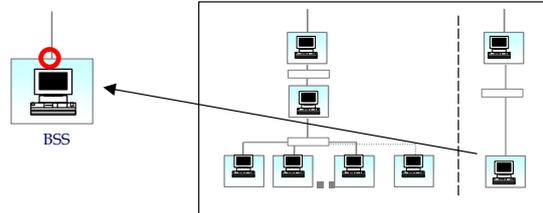
c. Network Device Configuration

EPs are required to configure CC OG directly attached network device (e.g. BSS network port, network switch, router port, firewall port, etc.) as **auto-negotiation** in speed and duplex operation. This, in turn, allows the CC OG to perform automatic configuration to achieve the best possible mode of operation over each end of the network link. The CC OG network interface supporting 10/100/1000 Mbps and half/full duplex mode coupled with auto-negotiation settings at network device would then maximize the network performance and avoid incompatible settings.

d. Broker Supplied System

BSS IP address should share the same LAN segment as CC OG do, therefore the IP address should be specified within the following range:

Network mask: 255. 255. 255. 0.
BSS IP address: 192. 168. 176. 128 – 254.



If BSS connects to multiple CC OGs, BSS can base on the IP addresses and port numbers at both ends to distinguish the origin of messages received.

It is recommended that the BSS should share the same IP subnet of the CC OG. If the BSS is located at different IP segment, Network Address Translation (NAT) should be used at the EPs' routers or firewalls so as the BSS can be reached at the same IP segment to the CC OG.

For EPs who have site specific requirement on network environment, where BSS CANNOT share the same segment with CC OG and the use of NAT is not feasible, they may request to change the CC OG downstream IP address prior to CC OG installation by completing and returning the "CC OG/BSS Downstream IP Address Change Requisition Form" (see Appendix 1 and Appendix 2) to the Appointed Service Vendors at their own cost.

Backup CC OG/BSS Downstream IP Address Change Requisition Form

Notes:

1. EP who requests to change the Backup CC OG/BSS downstream IP address should complete and return the requisition form by email to Appointed Service Vendor one week before CC OG installation and followed by telephone call to confirm submission. EP should also need to keep a copy of the requisition form for future support and maintenance purpose.
2. EP should directly contact the Appointed Service Vendor for service date, the cost for changing downstream IP address and the billing arrangement.
3. The downstream IP address range reserved for Backup CC OG is 192.168.176.1 – 192.168.176.127 (with default subnet mask equal to 255.255.255.0). Should EPs require to change the Backup CC OG downstream IP address, the requested IP address must not be 10 or 172 for the 1st octet of the downstream IP address.

To : CL Technical Services Ltd

Attn : Mr Roy Lam (Email : roy.kl-lam@clts.com or Tel. 90267415) or
Mr Mike Ko (Email : mikeko@clts.com or Tel. 94229531)

Part I – Participant Information

Name of Exchange Participant	Participant ID
Contact Person Name	Email Address
Office Phone No.	Mobile Phone No.

Part II – Details of Backup CC OG/BSS Downstream IP Address Setting Requested by EP

Related Backup CC OG Device ID :	Expected Service Date :	
Related Backup CC OG Installation Address :		
Backup CC OG/BSS Downstream Network Configuration	IP Address Setting Requested by EP	
Cluster Downstream IP Address <i>(Note 3)</i>		
First Node Downstream IP Address <i>(Note 3)</i>		
Second Node Downstream IP Address <i>(Note 3)</i>		
Downstream Subnet Mask		
BSS Segment(s) ➤ The segment number of BSS Server belong to (destination network)		
BSS Subnet Mask(s) ➤ The subnet number of BSS Server Segment (subnet for destination network)		
BSS Gateway ➤ The IP number of Gateway where the Backup CC OG belongs to (Gateway IP address in source network)		

Signature : _____

Date : _____

Backup CC OG/BSS Downstream IP Address Change Requisition Form

Notes:

1. EP requests to change the Backup CC OG/BSS downstream IP address should complete and return the requisition form by email to Appointed Service Vendor one week before CC OG installation and followed by telephone call to confirm submission. EP should also need to keep a copy of the requisition form for future support and maintenance purpose.
2. EP should directly contact the Appointed Service Vendor for service date, the cost for changing downstream IP address and the billing arrangement.
3. The downstream IP address range reserved for Backup CC OG is 192.168.176.1 – 192.168.176.127 (with default subnet mask equal to 255.255.255.0). Should EPs require to change the Backup CC OG downstream IP address, the requested IP address must not be 10 or 172 for the 1st octet of the downstream IP address.

To : Microware Ltd

Attn : Mr Ricky Ma (Email : ricky.ma@microware.com.hk or Tel. 97225083) or

Ms Haidy Wong (Email : haidy.wong@microware.com.hk or Tel. 91636325)

Part I – Participant Information

Name of Exchange Participant	Participant ID
Contact Person Name	Email Address
Office Phone No.	Mobile Phone No.

Part II – Details of Backup CC OG/BSS Downstream IP Address Setting Requested by EP

Related Backup CC OG Device ID :	Expected Service Date :	
Related Backup CC OG Installation Address :		
CC OG/BSS Downstream Network Configuration	IP Address Setting Requested by EP	
Cluster Downstream IP Address <i>(Note 3)</i>		
First Node Downstream IP Address <i>(Note 3)</i>		
Second Node Downstream IP Address <i>(Note 3)</i>		
Downstream Subnet Mask		
BSS Segment(s) ➤ The segment number of BSS Server belong to (destination network)		
BSS Subnet Mask(s) ➤ The subnet number of BSS Server Segment (subnet for destination network)		
BSS Gateway ➤ The IP number of Gateway where the Backup CC OG belongs to (Gateway IP address in source network)		

Signature : _____

Date : _____

Request for Backup CC OG Activation Form

Notes:

1. The request form should be completed and returned by fax (Fax No. 2521-7899) and followed by a telephone call at 2840-3626 to confirm the submission.
2. HKEX will act on this request form to activate the Backup CC OG(s) at the earliest opportunity upon receipt of a fax copy of the duly completed request form.
3. The Backup CC OG will have same CC OG device ID and carry all broker IDs & throttles of the production CC OG.
4. **The switchover of Backup CC OG remains effective for the rest of incident reported day. EP should submit the “Request for Activation of Production CC OG(s) and/or Continuation of Backup CC OG Form” to HKEX – Cash Trading no later than 4:00p.m. on incident reported day to confirm the next trading day arrangement. Resumption of production CC OG(s) within the same trading day will not be accommodated once the switchover of Backup CC OG has taken place.**
5. For enquiry, please contact HKEX – Participant General Enquiry Hotline at 2840-3626.

Part I – Participant Information

Name of Exchange Participant	Participant ID
Contact Person Name	Phone No.

Part II – Details of Backup CC OG Activation

CC OG Device ID : _____ OG BSS

Change the IP Address of the CC OG Device ID from Production Site to Backup Site

Backup CC OG IP address : _____ . _____ . _____ . _____

Reason(s) for request : _____

By signing below, we consent to the processing of personal data in accordance with the Privacy Policy Statement included in this form.

Signature of Responsible Officer with Company Chop : _____ Date : _____

Name of Responsible Officer : _____

**Request for Activation of Production CC OG(s) and/or
Continuation of Backup CC OG Form
(This form should be submitted before 4:00 pm)**

Notes:

1. The request form should be completed and returned by fax (Fax No. 2521-7899) and followed by a telephone call at 2840-3626 to confirm the submission.
2. When EP fallbacks its CC OG from production site to backup site on incident reported day, EP should submit this form to HKEX – Cash Trading before 4:00pm on incident reported day to confirm the next trading day arrangement.
3. Part II is for EP who wants to activate the CC OG in production site on next trading day on condition that related problem has been fixed.
4. Part III is for EP who wants to continuously use the Backup CC OG on next trading day after the incident reported day.
5. For enquiry, please contact HKEX – Participant General Enquiry Hotline at 2840-3626.

Part I – Participant Information

Name of Exchange Participant	Participant ID
Contact Person Name	Phone No.

Part II – Details of Production CC OG(s) Re-Activation

Date of Activation of CC OG at Production Site: _____

CC OG Device ID : _____ OG BSS

Part III – Details of Continuation Backup CC OG

Date of Activation of CC OG at Backup Site: _____

CC OG Device ID : _____ OG BSS

Change the IP Address of the CC OG Device ID from Production Site to Backup Site

Backup Site CC OG IP address : _____ . _____ . _____ . _____

By signing below, we consent to the processing of personal data in accordance with the Privacy Policy Statement included in this form.

Signature of Responsible Officer with Company Chop : _____ Date : _____

Name of Responsible Officer : _____

Privacy Policy Statement

Hong Kong Exchanges and Clearing Limited, and from time to time, its subsidiaries (together the "Group") (and each being "HKEX", "we", "us" or "member of the Group" for the purposes of this Privacy Policy Statement as appropriate) recognise their responsibilities in relation to the collection, holding, processing, use and/or transfer of personal data under the Personal Data (Privacy) Ordinance (Cap. 486) ("PDPO"). Personal data will be collected only for lawful and relevant purposes and all practicable steps will be taken to ensure that personal data held by us is accurate. We will use your personal data which we may from time to time collect in accordance with this Privacy Policy Statement.

We regularly review this Privacy Policy Statement and may from time to time revise it or add specific instructions, policies and terms. Where any changes to this Privacy Policy Statement are material, we will notify you using the contact details you have provided us with and, where required by the PDPO, give you the opportunity to opt out of these changes by means notified to you at that time. Otherwise, in relation to personal data supplied to us through the HKEX website or otherwise, continued use by you of the HKEX website or your continued relationship with us shall be deemed to be your acceptance of and consent to this Privacy Policy Statement, as amended from time to time.

If you have any questions about this Privacy Policy Statement or how we use your personal data, please contact us through one of the communication channels set out in the "Contact Us" section below.

We will take all practicable steps to ensure the security of the personal data and to avoid unauthorised or accidental access, erasure or other use. This includes physical, technical and procedural security methods, where appropriate, to ensure that the personal data may only be accessed by authorised personnel.

Please note that if you do not provide us with your personal data (or relevant personal data relating to persons appointed by you to act on your behalf) we may not be able to provide the information, products or services you have asked for or process your requests, applications, subscriptions or registrations, and may not be able to perform or discharge the Regulatory Functions (defined below).

Purpose

From time to time we may collect your personal data including but not limited to your name, mailing address, telephone number, email address, date of birth and login name for the following purposes:

1. to process your applications, subscriptions and registration for our products and services;
2. to perform or discharge the functions of HKEX and any company of which HKEX is the recognised exchange controller (as defined in the Securities and Futures Ordinance (Cap. 571)) ("Regulatory Functions");
3. to provide you with our products and services and administer your account in relation to such products and services;
4. to conduct research and statistical analysis;
5. to process your application for employment or engagement within HKEX to assess your suitability as a candidate for such position and to conduct reference checks with your previous employers; and
6. other purposes directly relating to any of the above.

Direct marketing

Where you have given your consent and have not subsequently opted out, we may also use your name, mailing address, telephone number and email address to send promotional materials to you and conduct direct marketing activities in relation to HKEX financial services and information services, and financial services and information services offered by other members of the Group.

If you do not wish to receive any promotional and direct marketing materials from us or do not wish to receive particular types of promotional and direct marketing materials or do not wish to receive such materials through any particular means of communication, please contact us through one of the communication channels set out in the "Contact Us" section below. To ensure that your request can be processed quickly please provide your full name, email address, log in name and details of the product and/or service you have subscribed.

Identity Card Number

We may also collect your identity card number and process this as required under applicable law or regulation, as required by any regulator having authority over us and, subject to the PDPO, for the purpose of identifying you where it is reasonable for your identity card number to be used for this purpose.

Transfers of personal data for direct marketing purposes

Except to the extent you have already opted out we may transfer your name, mailing address, telephone number and email address to other members of the Group for the purpose of enabling those members of the Group to send promotional materials to you and conduct direct marketing activities in relation to their financial services and information services.

Other transfers of your personal data

For one or more of the purposes specified above, your personal data may be:

1. transferred to other members of the Group and made available to appropriate persons in the Group, in Hong Kong or elsewhere and in this regard you consent to the transfer of your data outside of Hong Kong;
2. supplied to any agent, contractor or third party who provides administrative, telecommunications, computer, payment, debt collection, data processing or other services to

HKEX and/or any of other member of the Group in Hong Kong or elsewhere; and
3. other parties as notified to you at the time of collection.

How we use cookies

If you access our information or services through the HKEX website, you should be aware that cookies are used. Cookies are data files stored on your browser. The HKEX website automatically installs and uses cookies on your browser when you access it. Two kinds of cookies are used on the HKEX website:

Session Cookies: temporary cookies that only remain in your browser until the time you leave the HKEX website, which are used to obtain and store configuration information and administer the HKEX website, including carrying information from one page to another as you browse the site so as to, for example, avoid you having to re-enter information on each page that you visit. Session cookies are also used to compile anonymous statistics about the use of the HKEX website.

Persistent Cookies: cookies that remain in your browser for a longer period of time for the purpose of compiling anonymous statistics about the use of the HKEX website or to track and record user preferences.

The cookies used in connection with the HKEX website do not contain personal data. You may refuse to accept cookies on your browser by modifying the settings in your browser or internet security software. However, if you do so you may not be able to utilise or activate certain functions available on the HKEX website.

Compliance with laws and regulations

HKEX and other members of the Group may be required to retain, process and/or disclose your personal data in order to comply with applicable laws and regulations or in order to comply with a court order, subpoena or other legal process (whether in Hong Kong or elsewhere), or to comply with a request by a government authority, law enforcement agency or similar body (whether situated in Hong Kong or elsewhere) or to perform or discharge the Regulatory Functions. HKEX and other members of the Group may need to disclose your personal data in order to enforce any agreement with you, protect our rights, property or safety, or the rights, property or safety of our employees, or to perform or discharge the Regulatory Functions.

Corporate reorganisation

As we continue to develop our business, we may reorganise our group structure, undergo a change of control or business combination. In these circumstances it may be the case that your personal data is transferred to a third party who will continue to operate our business or a similar service under either this Privacy Policy Statement or a different privacy policy statement which will be notified to you. Such a third party may be located, and use of your personal data may be made, outside of Hong Kong in connection with such acquisition or reorganisation.

Access and correction of personal data

Under the PDPO, you have the right to ascertain whether we hold your personal data, to obtain a copy of the data, and to correct any data that is inaccurate. You may also request us to inform you of the type of personal data held by us. All data access requests shall be made using the form prescribed by the Privacy Commissioner for Personal Data ("Privacy Commissioner") which may be found on the official website of the Office of the Privacy Commissioner or via this link <https://www.pcpd.org.hk/english/publications/files/Dforme.pdf>

Requests for access and correction of personal data or for information regarding policies and practices and kinds of data held by us should be addressed in writing and sent by post to us (see the "Contact Us" section below).

A reasonable fee may be charged to offset our administrative and actual costs incurred in complying with your data access requests.

Termination or cancellation

Should your account or relationship with us be cancelled or terminated at any time, we shall cease processing your personal data as soon as reasonably practicable following such cancellation or termination, provided that we may keep copies of your data as is reasonably required for archival purposes, for use in relation to any actual or potential dispute, for the purpose of compliance with applicable laws and regulations and for the purpose of enforcing any agreement we have with you, for protecting our rights, property or safety, or the rights, property or safety of our employees, and for performing or discharging our functions, obligations and responsibilities.

General

If there is any inconsistency or conflict between the English and Chinese versions of this Privacy Policy Statement, the English version shall prevail.

Contact us

By Post:
Personal Data Privacy Officer
Hong Kong Exchanges and Clearing Limited
12/F., One International Finance Centre
1 Harbour View Street
Central
Hong Kong

By Email:
DataPrivacy@HKEX.COM.HK