

**Section A – Notes to the Application**

- a. **China Connect Central Gateway (CCCG) Session** : CCCG in the application form and explanatory note has the same meaning of China Connect Central Gateway (CCCG) as defined in the Rules of the Exchange. CCCG is a hardware and software component operated by the Exchange, which provides the communications interface between the CSC and the Broker Supplied System (BSS) of the China Connect Exchange Participants and other devices. EPs may connect their BSS to CCCG via subscription to one or more CCCG sessions. CCCG session is for trading (i.e. for orders submission) only and will not carry securities market data. EP may subscribe market data directly from HKEX Orion Market Data Platform – China Connect (Securities) (OMD-CC), directly from Shanghai and/or Shenzhen Stock Exchange and/or indirectly via information vendors. EP subscribing CCCG session may apply for a Backup CCCG session as a backup of the CCCG session.
- b. **Message Protocol** : A CCCG session can support either Binary or FIX message protocol and must be specified before the connection. EP should refer to the interface specifications of CCCG for details of these two message protocols at [http://www.hkex.com.hk/eng/csm/securities\\_technical\\_documents.htm](http://www.hkex.com.hk/eng/csm/securities_technical_documents.htm) .
- c. **IP Address Scheme for CCCG/BSS** : It will be provided separately in the [Connectivity Guide HKEX CCCG Platform](#).
- d. **Existing CCCG/BSS System Connected to the Applied CCCG Session** : EP connecting an existing CCCG/BSS system to the newly applied CCCG session is only required to conduct rollout test to verify the connection among existing CCCG/BSS, the applied CCCG session and CSC via production circuits. EP may rollout the newly applied CCCG session after successful completion of rollout test, submission of BSS Declaration and rollout notification to HKEX by giving not less than 2 weeks in advance notice.
- e. **New BSS System Connected to the Applied CCCG Session** : EP connecting a new BSS system to the newly applied CCCG session is required to conduct a full cycle of BSS testing before connecting to CCCG session and CSC for trading. The BSS testing shall include offline simulator test, end-to-end test and rollout test. EP can download the BSS testing package from Electronic Communication Platform (ECP) at <https://www.ecp.hkex.com.hk/> or contact HKEX – Participant General Enquiry Hotline at 2840-3626 for assistance on collection of the BSS testing package. After submission of positive simulator test and end-to-end test results, HKEX will schedule EP to conduct rollout test to verify the connection among new BSS, the applied CCCG session and CSC via production circuits. EP may rollout the newly applied CCCG session after successful completion of rollout test, submission of BSS Declaration and rollout notification to HKEX by giving not less than 2 weeks in advance notice.
- f. **Relocation of BSS** : If the relocation of BSS, including but not exclusively the relocation of BSS to / from HKEX Hosting Data Centre, will result in change of its IP address, EP have to inform HKEX by submitting the [“Requisition Form for Change of BSS Connection Information for China Connect Central Gateway \(CCCG\) Trading / Drop-Copy Session”](#) at least 3 working days advance notice before the effective date.
- g. **Standard CCCG Throttle Rate Assignment** : One standard CCCG throttle rate provides the throughput of two messages per second. Maximum of 250 standard CCCG throttle rate(s) can be assigned to a CCCG session. CCCG throttle rates are for trading through CSC which cannot be transferred to AMS trading device for trading Hong Kong stocks via AMS/3, and vice versa.
- h. **Message Rate Throttling** : All in-bound messages such as order submission, order cancel, etc. are collectively referred to as messages. Messages exceeding the entitled message rate will be rejected and BSS should be able to re-submit the message(s) when necessary. HKEX reserves the right to disconnect a CCCG session, without any further exchange of messages, if that CCCG session is found to be excessively violating the message rate.

*(Updated in July 2017)*

- i. **Broker Number Assignment** : Each CCCG session is required to assign at least one broker number. EP may request for an additional new broker number for assignment to CCCG session but the quantity should not be more than the standard throttle assigned. HKEX reserves the right to accept or reject the request of additional new broker number without further explanation. Each EP cannot have more than 80 broker numbers in total for all trading devices connecting to AMS/3 and CSC. The same broker number cannot be assigned to other CCCG session or facilities for trading purpose.
- j. **Circuit and Network Switch Installation** : Dual circuits connection is required for CCCG session connecting to CSC. EP can install separate dual circuits for CCCG session. Or EP can share the same dual circuits of CCCG session with other HKEX applications, depending on the type of network subscription by referring to the below table. EP should ensure sufficient bandwidth to meet with different HKEX applications and consider the resilience.

Type of network subscription	Other HKEX application allow to <b>share with same circuits of CCCG Session</b>					
	CC Drop-Copy	OMD-CC	OCG	Drop-Copy	OMD-C	CCOG
(i) SDNet/2 circuit	✓	✓	✓	✓	✓	X
(ii) SDNet/2 ASP connection	✓	✓	✓	✓	✓	X
(iii) HSN	✓	✓	✓	✓	✓	✓
(iv) HSN Virtual Port Service	✓	✓	✓	✓	✓	✓

- ✓ allow to share with same circuits of CCCG Session  
X not allow to share with same circuits of CCCG Session

Type of network subscription :

- (i) via SDNet/2 circuits provided by Accredited Vendor (i.e. HKT, WTT and HGC). The contact information of Accredited Vendor is posted at HKEX website [http://www.hkex.com.hk/eng/market/sec\\_tradinfra/sdnet2.htm](http://www.hkex.com.hk/eng/market/sec_tradinfra/sdnet2.htm).
- (ii) via SDNet/2 Application Service Provider (ASP) connection provided by ASP. ASP subscribes SDNet/2 circuits from Accredited Vendor (i.e. HKT, WTT and HGC) and provides shared SDNet/2 circuits connectivity to multiple EPs and manage the network connectivity on behalf of the EPs. However, there is a cap on the number of EPs and market turnover volume on each SDNet/2 ASP connection to minimize concentration risk. EP may check with the ASP before subscribing to the services. In addition, EP should check with the ASP the circuit number, IP addresses and the installation date in order to fill in the form of Application for China Connect Central Gateway Session.
- For more information of ASP connection, please refer to “Frequently Asked Questions” of SDNet/2 on HKEX website [http://www.hkex.com.hk/eng/market/sec\\_tradinfra/sdnet2.htm](http://www.hkex.com.hk/eng/market/sec_tradinfra/sdnet2.htm).
- (iii) via HKEX Service Network (HSN) provided by HKEX Hosting Services. The contact information of HKEX Hosting Services is posted at HKEX website <http://www.hkex.com.hk/eng/prod/hosting/hostingservices.htm>.
- (iv) via HSN Virtual Port Service provided by HKEX Hosting Services Approved ASP. Multiple EP’s trading facilities can be aggregated on the same HSN connection. However, there is a cap on number of EPs and market turnover volume on each aggregated HSN connection to minimize the concentration risk. EP may check with HKEX Hosting Services Approved ASP before subscribing to the services. In addition, EP should check with HKEX Hosting Services Approved ASP the circuit number, IP addresses and the installation date in order to fill in the form of Application for China Connect Central Gateway.

EP is responsible for arranging with network provider directly for circuits and network switch(es) installation, quotation and billing arrangement. EP should ensure the readiness of circuits and network switch(es) prior to connecting to CCCG session. For further details on network configuration, EP should refer to the [Connectivity Guide HKEX CCCG Platform](#).

For market data related arrangement, please contact HKEX-IS by sending email to [marketdata@hkex.com.hk](mailto:marketdata@hkex.com.hk).

k. **Bandwidth Requirement** : The minimum bandwidth requirement for CCCG session is listed as below :

CCCG Session	Minimum Bandwidth Requirement
Trading	60 Kbps/Throttle

- l. **Monthly Fee for CCCG Session/ Backup CCCG Session** : The monthly fee will be charged at amounts depending on the number of standard CCCG throttle rates assigned to the CCCG session/Backup CCCG session (i.e. low, standard and high capacity) rolled out as at the first trading day of each month. The fee is calculated on a full month basis. A new CCCG session/ Backup CCCG session roll out on the 2<sup>nd</sup> 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 CCCG session/ Backup CCCG session if termination is made during the month. Please refer to Section B – “Fees and Charges” for details of charges.
- m. **Monthly Fee for Standard CCCG Throttle Rate assigned to CCCG Session** : The monthly fee will be charged base on the number of standard CCCG throttle rate assigned to the CCCG session 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 standard CCCG throttle rate during the month. Please refer to Section B – “Fees and Charges” for details of charges.
- n. **Backup Arrangement for CCCG Session** : In order to reduce the disruption to the EP’s trading operations due to the failure of its CCCG/BSS, for each CCCG session, EP may apply for a backup CCCG session for connection from a backup CCCG/BSS in its office or in its business continuity centre by providing a maximum 3 additional IP addresses to HKEX for the same Comp ID. EP can connect to its backup CCCG session via the backup CCCG/BSS and continue trading without prior notification to HKEX. EP should take note that only one of the 4 BSS IP addresses (i.e. 1 primary and 3 backup IPs) can be allowed connection using the assigned Comp ID at any time.
- o. **HKEX Orion Market Data Platform – China Connect (Securities) (“OMD-CC”) Connection** : EP may choose to receive market data (1) directly from OMD-CC; (2) directly from Shanghai and / or Shenzhen Stock Exchange and/or (3) indirectly via information vendors. If EP chooses the first option, EP needs to sign the Standard Terms and Conditions for Use of China Connect Market Data (“OMD-CC T&C”) with HKEX Information Services Limited. Each EP will be given two standard sets of OMD-CC connections under the OMD-CC T&C. Please contact Market Data team by sending email to MarketData@hkex.com.hk for more information on OMD-CC and OMD-CC ASP.
- p. **Migration Period Definition** : EP can run the to-be-migrated trading device (e.g. CCOG) and the corresponding CCCG session in parallel and migrate broker numbers and throttles from CCOG to CCCG session gradually. Migration period is from the CCCG session rollout date to the end of the following calendar month.
- q. **Migration Period Fee Arrangement** : Only respective trading device (e.g. CCOG) monthly fee will be charged in the first month of migration period as defined above and CCCG session fee will apply thereafter provided that the corresponding CCOG is de-installed as at the end of the migration period. If the corresponding CCOG is not de-installed as at the end of the migration period, the one-time Administration fee for CCCG session as defined in Section B will apply and EP will also need to pay the monthly fee for both of CCOG and CCCG session.

## Section B – Fees and Charges

### a. One-Time Charge (*subject to SFC approval*)

Fee Type	Amount (HK\$)
Administration fee for each CCCG session or backup CCCG session  Note: Administration fee will be exempted for CCCG session as a result of migration from the existing trading device used for the same purpose (e.g. migration of trading China Connect Open Gateway to trading CCCG session)	\$20,000
Standard CCCG throttle	\$50,000 each

### b. Monthly Fee (*subject to SFC approval*)

Chargeable Item	Amount (HK\$)
CCCG Session Fee or Backup CCCG Session Fee Low Capacity Up to 20 standard CCCG throttles assigned	\$2,000 for the 1st session for trading or its backup of each EP; \$7,500 for each additional session
Standard Capacity 21 – 60 standard CCCG throttles assigned	\$10,000 for each session
High Capacity 61 – 100 standard CCCG throttles assigned	\$15,000 for each session
101 – 150 standard CCCG throttles assigned	\$20,000 for each session
151 – 200 standard CCCG throttles assigned	\$25,000 for each session
201 – 250 standard CCCG throttles assigned	\$30,000 for each session
Each Standard CCCG Throttle Rate acquired from HKEX and assigned to a CCCG session	\$960