

Section A – Notes to the Application

- a. **China Connect Drop-Copy Session:** China Connect Drop-Copy session means a connection to the China Connect Drop-Copy Service. China Connect Drop-Copy Service is a real-time reporting service in respect of orders and trades of an Exchange Participant (EP) that have been inputted into or recorded by the CSC. EP can choose to receive trades only or orders and trades done through all input devices (i.e. CCCG session), as long as all of its broker number are assigned to the China Connect Drop-Copy Session. For each China Connect Drop-Copy session an EP subscribes, it may apply for a Backup China Connect Drop-Copy session.
- b. **Message Protocol:** A China Connect Drop-Copy Session can support either Binary or FIX message protocol. Selection must be specified before the connection. EP should refer to the interface specifications of China Connect Drop-Copy for details of these two message protocols at <u>http://www.hkex.com.hk/mutual-market/stock-connect/reference-materials/technical-documents?sc_lang=en</u>.
- c. IP Address Scheme for China Connect Drop-Copy Session: It will be separately provided in the Connectivity Guide HKEX CCCG Platform.
- d. Testing Requirement of the Applied China Connect Drop-Copy Session: A full cycle of BSS conformance test shall include offline simulator test, end-to-end test and rollout test. BSS testing package can be downloaded via Electronic Communication Platform (<u>ECP</u>). Potential EP, who has submitted China Connect Drop-Copy Session Application Form, may contact HKEX Participant General Enquiry Hotline at 2840-3626 for 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 BSS, the applied China Connect Drop-Copy session and CSC Host via production circuits.

Below is the type of conformance test to conduct for the applied China Connect Drop-Copy session:

	BSS Version	Network to be connected	Type of Conformance Test required to conduct			
			Offline Simulator Test	End-to-End Test	Rollout Test	
Application for a new China Connect Drop-Copy session	New BSS	New SDNet/2 or HSN	Yes	Yes	Yes	
	New BSS	Existing SDNet/2 or HSN	Yes	Yes	Yes ("Not Required" if EP agrees with limited support/ troubleshoot from HKEX during weekdays) ^{NB1}	
	Existing BSS	New SDNet/2 or HSN	No	No	Yes	
	Existing BSS	Existing SDNet/2 or HSN	No	No	Yes ("Not Required" if EP agrees with limited support/ troubleshoot from HKEX during weekdays) ^{NB1}	

^{NB1} Rollout test is applicable for new China Connect Drop-Copy session application. If the applied China Connect Drop-Copy session will connect to existing SDNet/2 or HSN and EP wishes not to participate in the Rollout Test, EP is required to complete and return the "Application for Exemption from Conducting Rollout Test.

If the exemption is granted, the EP applied for the new China Connect Drop-Copy session will undertake all possible technical and/or operational risks that may have been resulted from non-participation in Rollout test

to verify connection of the new China Connect Drop-Copy session. The EP also warrants that it will not request HKEX to carry out any troubleshooting or changes in production environment for, and not limited to, server hardware, system software, network setting or network equipment (e.g. circuits, router, switch & firewall), from Monday to Friday in case of failure in connection of the new China Connect Drop-Copy session during initial rollout.

- e. Rollout the New China Connect Drop-Copy Session: EP may rollout the new China Connect Drop-Copy session after successful completion of required test(s), submission of offline simulator test confirmation reply, end-to-end test confirmation reply, execution checklist (if applicable), BSS Declaration and rollout notification to HKEX by giving not less than 1 week in advance notice.
- f. Relocation of Existing Circuits Connected to BSS Connecting to China Connect Drop-Copy Session: EP has 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 trading days in advance prior to the effective date. EP is required to participate in the Rollout Test. If an EP wishes not to participate in the Rollout test, it is required to complete and return the "Application for Exemption from Conducting Rollout Test". If the exemption is granted, the EP undertakes all possible technical and/or operational risks that may have been resulted from non-participation in Rollout Test to verify connection of the BSS after relocation. The EP also warrants that it will not request HKEX to carry out any troubleshooting or changes in production environment for, and not limited to, server hardware, system software, network setting or network equipment (e.g. circuits, router, switch & firewall), from Monday to Friday in case of failure in connection of the BSS after the relocation.
- g. **Broker Number Assignment:** Each China Connect Drop-Copy session is required to assign at least one broker number and the maximum is 80 broker numbers. Each EP cannot have more than 80 broker numbers in total, regardless of the number of trading devices operated by EP. The same broker number can be assigned to one or more China Connect Drop-Copy session of the same EP.
- h. Circuit and Network Switch Installation: Dual-circuit connection is required for connecting each China Connect Drop-Copy session to CSC. EP can either install dedicated dual circuits for China Connect Drop-Copy session(s), or can share the same dual circuits of China Connect Drop-Copy session(s) with other HKEX applications, depending on the type of network subscription. Please refer to the table below for details. EP should ensure sufficient bandwidth to meet the needs of different HKEX applications, and consider system resiliency.

	Other HKEX applications allowed to share same circuits with China Connect Drop-Copy session(s)				
Type of network subscription	CCCG	OMD-CC	OCG	Drop-Copy	OMD-C
(i) SDNet/2 circuit	~	✓	✓	✓	✓
(ii) SDNet/2 ASP connection	~	✓	✓	✓	✓
(iii) HSN	~	✓	✓	✓	✓
(iv) HSN Virtual Port Service	~	✓	✓	✓	\checkmark

✓ allow to share same circuits with China Connect Drop-Copy Session(s)

X not allow to share same circuits with China Connect Drop-Copy Session(s)

Type of network subscription:

(i) via SDNet/2 circuits provided by Accredited Vendor. The contact information of Accredited Vendor is posted at HKEX website

http://www.hkex.com.hk/Services/Connectivity/SDNet-2/Securities-Trading-(AMS3-Shanghai-and-Shenzhen-Connect)?sc lang=en.

(ii) via SDNet/2 Application Service Provider (ASP) connection provided by ASP. ASP subscribes SDNet/2 circuits from Accredited Vendor, provides shared SDNet/2 circuit connectivity to multiple EPs, and manages the network connectivity on behalf of its service subscribers. However, there is a cap on the number of EPs and turnover market share on each SDNet/2 ASP connection to minimize concentration risk. EP may check with the ASP for details before subscribing to the services. In addition,

EP should check with the ASP the circuit number, IP addresses and installation date in order to fill in the form of Application for China Connect Central Gateway Session.

For more information on ASP connection, please refer to "Frequently Asked Questions" of SDNet/2 on HKEX website <u>http://www.hkex.com.hk/Global/Exchange/FAQ/Securities-Market/Trading/SDNET-2?sc_lang=en</u>.

- (iii) via HKEX Service Network (HSN) provided by HKEX Hosting Services. The contact information of HKEX Hosting Services is posted at HKEX website <u>http://www.hkex.com.hk/services/connectivity/hosting-services?sc_lang=en</u>.
- (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 turnover market share on each aggregated HSN connection to minimize the concentration risk. EP may check with the HKEX Hosting Services Approved ASP before subscribing to the services. In addition, EP should check with the HKEX Hosting Services Approved ASP circuit number, IP addresses and 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 China Connect Drop-Copy 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.

i. **Bandwidth Requirement:** The minimum bandwidth requirement for China Connect Drop-Copy session is listed below:

China Connect Drop-Copy Session	Minimum Bandwidth Requirement		
With Orders and Trades	60 Kbps/Throttle		
With Trades Only	20 Kbps/Throttle		

China Connect Drop-Copy session will include orders and trades from the CCCG sessions of the assigned broker number. EP should estimate number of throttles to be utilized for each China Connect Drop-Copy session base on its own trading pattern.

- j. Monthly Fee for China Connect Drop-Copy Session/ Backup China Connect Drop-Copy Session: The monthly fee is calculated on a full calendar month basis and will be based on number of rolled out sessions as at the first trading day of each month. A new China Connect Drop-Copy session/Backup China Connect Drop-Copy session roll out on the 2nd trading day or afterwards during the month will be charged of the monthly fee in the following month. There will be no refund of China Connect Drop-Copy session/Backup China Connect Drop-Copy session/Backup China Connect Drop-Copy session fee for the month if the termination is effective during the month. Please refer to Section B "Fees and Charges" for details of charges.
- k. Backup Arrangement for China Connect Drop-Copy Session: In order to reduce service impact to EPs due to failure of China Connect Drop-Copy session, for each China Connect Drop-Copy session, EP may apply for a backup China Connect Drop-Copy session for connection from a backup device in its office or in its business continuity centre by providing a maximum 3 additional IP address to HKEX for same Comp ID. EP can connect to its backup China Connect Drop-Copy session via the backup device and continue the service without notifying HKEX. EP should take note that at any time, only one of the 4 IP addresses (i.e. 1 primary and 3 backup IPs) is allowed to connect by using the assigned Comp ID.

a. Monthly Fee

Chargeable Item	Amount (HK\$)
China Connect Drop-Copy Session or Backup China Connect Drop-Copy Session	\$4,500 for each session, except that there shall be no charge for the first Drop-Copy session and its backup of each EP