

Section A – Notes to the Application

- a. **Drop-Copy Session:** Drop-Copy Session means a connection to the Drop-Copy Service. Drop-Copy Service is a real-time and read-only data service designed to facilitate monitoring of trade and order activities. EP can choose to receive trades only or orders and trades done through all input devices (i.e. CG Session), as long as all of its broker number are assigned to the Drop-Copy Session. For each Drop-Copy session an EP subscribes, it may apply for a Backup Drop-Copy session.
- b. **Message Protocol:** A Drop-Copy Session can support either Binary or FIX message protocol and must be specified before the connection. EP should refer to the interface specifications of Drop-Copy for details of these two message protocols at http://www.hkex.com.hk/eng/market/sec_tradinfra/ocg/orioncg.htm.
- c. **IP Address Scheme for Drop-Copy Session:** It will be separately provided in the [Connectivity Guide HKEX Orion Central Gateway – Securities Market \(OCG-C\)](#).
- d. **Testing Requirement of a Drop-Copy Session under application:** A full cycle of BSS conformance test shall include offline simulator test, end-to-end test and rollout test. EP 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 Drop-Copy session and OTP-C Host via production circuits.

Below is the type of conformance test to conduct for the applied 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 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 a new Drop-Copy session application. If the new 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”.

(Updated in October 2021)

If exemption is granted, the EP applied for the new 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 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 Drop-Copy session during initial rollout.

- e. **Rollout the New Drop-Copy Session:** EP may rollout the new Drop-Copy session after successful completion of required test(s), submission of offline simulator test confirmation reply, end-to-end test confirmation reply, end-to-end test result via test portal website, 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 Drop-Copy Session:** EP has to inform HKEX by submitting the "[Requisition Form for Change of BSS Connection Information for Orion Central Gateway – Securities Market \(OCG-C\)/ Drop Copy Session](#)" at least 3 trading days 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:** EP is required to assign at least one broker number to each Drop-Copy session and the maximum assignment is 80 broker numbers. Each EP cannot have more than 80 broker numbers in total for all trading devices connected to OTP-C and CSC. The same broker number can be assigned to one or more Drop-Copy session of the same EP.
- h. **Circuit and Network Switch Installation:** Dual-circuit connection is required for connecting each Drop-Copy session. EP can either install dedicated dual circuits for Drop-Copy session(s) or share the same circuits of 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.

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

- ✓ allow to share same circuits with Drop-Copy Session
- X not allow to share same circuits with Drop-Copy Session

Type of network subscription:

- (i) via SDNet/2 circuits provided by Accredited Vendor. The contact information of Accredited Vendor is posted at HKEX website
[https://www.hkex.com.hk/Services/Connectivity/SDNet-2/Securities-Trading-\(OTPC-Shanghai-and-Shenzhen-Connect\)?sc_lang=en](https://www.hkex.com.hk/Services/Connectivity/SDNet-2/Securities-Trading-(OTPC-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 manage 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 circuit number, IP addresses and installation date in order to fill in the form of Application for Drop-Copy Session.

For more information on ASP connections, please refer to "Frequently Asked Questions" of SDNet/2 on HKEX website

http://www.hkex.com.hk/Global/Exchange/FAQ/Securities-Market/Trading/SDNET-2?sc_lang=en.

(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 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 Drop-Copy Session.

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 Drop-Copy session. For further details on network configuration, EP should refer to the [Connectivity Guide HKEX Orion Central Gateway - Securities Market \(OCG-C\)](#).

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 Drop-Copy session is listed below:

Drop-Copy Session	Minimum Bandwidth Requirement
With Orders and Trades	40 Kbps/Throttle
With Trades Only	20 Kbps/Throttle

Drop-Copy session will include trades only or orders and trades of the selected broker number assigned to Drop-Copy session. EP should estimate number of throttles to be utilized for each Drop-Copy session base on its own trading pattern.

j. **Monthly Fee for Drop-Copy Session/ Backup 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 Drop-Copy session/Backup Drop-Copy session rolled 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 Drop-Copy session/Backup 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 Drop-Copy Session:** In order to reduce disruption to the EP's trading operations due to the failure of its Drop-Copy session, for each Drop-Copy session, EP may apply for a backup 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 addresses to HKEX for same Comp ID. EP can connect to its backup Drop-Copy session via the backup device and continue the service without prior notification to 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.

Section B – Fees and Charges

a. Monthly Fee

<i>Chargeable Item</i>	<i>Amount (HK\$)</i>
Drop-Copy Session or Backup Drop-Copy Session	\$4,500 for each session, except that there shall be no charge for the first session of each EP