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香港交易所設備託管服務有限公司

(香港交易及結算所有限公司集團全資附屬成員機構)

HKEX HOSTING SERVICES LIMITED

(A wholly-owned member of the Hong Kong Exchanges and Clearing Limited Group)

客戶通告 SUBSCRIBER NOTICE

Subject: HSN Firewalls and Network Switches Replacement – HSN Readiness Test

Enquiry: HKEX Hosting Service Desk Hotline

Tel: (852) 2211 6080 or Email: hsservicedesk@hkex.com.hk

To: All Subscribers

Reference is made to the Subscriber Notice (ref: <u>HDS/19/0611</u>) dated 19 June 2019. HKEX Hosting Services ("HKEX-Hosting") plans to replace the firewalls and network switches ("Hardware Replacement") for HKEX Service Network ("HSN").

In order to minimize the risk of implementation of the new HSN hardware, the new equipment will be deployed in three phases over multiple weekends (please refer to the schedule in page 5 of this notice).

To ensure a smooth Hardware Replacement, it is a <u>mandatory</u> requirement for HSN subscribers to participate in the HSN Readiness Test to be held on Saturday, 31 August 2019, in order to test the infrastructure readiness for Phases 1 to 3 of HSN Production Cutover. HSN subscribers are required to declare the readiness for the Hardware Replacement.

After the Readiness Test, HSN will be fallback to the to-be-replaced firewalls and network switches ("Original HSN"). HSN subscribers are encouraged to verify the connections to ensure proper connectivity.

1. Submit the completed Attachment 1 "Participation Form of HSN Readiness Test on 31 August 2019" to HKEX Hosting Service Desk for confirmation of participation in the HSN Readiness Test by fax or email <u>at or before 6:00p.m. on 21 August 2019</u>. (Fax No.: (852) 2462 0722 Email: hsservicedesk@hkex.com.hk)



2. HSN Readiness Test on 31 August 2019

Date/Time	Brief Activities		
Phase 1: Replace the H			
2:00p.m. to 4:00p.m.	HSN subscribers participate in the below tests, if applicable		
	Cash Market: OTP-C test for production OCG/BSS connecting to HSN and production OCG/NSTD (applicable to Exchange Participants being invited by ET Trade Ltd)		
	Please refer to the Attachment 2 : "OTP-C Test Rundown for New HSN Readiness Test"		
	Derivatives Market: HKATS and/or DCASS test(s) (Logon test from 2:00p.m., Order/Post-trade input test from 2:30p.m.)		
	Please refer to the Attachments 3 and 4 for "HSN Readiness Test for Exchange Participants (HKATS) 31 August 2019" and "HSN Readiness Test on 31 August 2019 Information Package for HKCC / SEOCH Participants" respectively.		
	Market Data Systems: OMD-C, OMD-CC, OMD-D and/or IIS test(s)		
	Please verify all subscribed OMD multicast groups as well as the retransmission (RTS) unicast connectivity.		
	For IIS, please perform logon test.		
	China Stock Connect : CCCG logon test		
	Only allow to perform logon test, kindly use the assigned Comp ID(s) and password " Ab123456 " to perform logon.		
Phase 2: Replace the P	rimary HSN network switches		
4:00p.m. to 5:00p.m.	Migration of Primary HSN by HKEX, no testing activity for HSN subscribers		
5:00p.m. to 6:00p.m.	HSN subscribers participate in the below tests, if applicable		
	Cash Market: OTP-C test for production OCG/BSS connecting to HSN and production OCG/NSTD (applicable to Exchange Participants being invited by ET Trade Ltd)		
	Please refer to the Attachment 2 : "OTP-C Test Rundown for New HSN Readiness Test"		
	Derivatives Market: HKATS and/or DCASS test(s)		



Date/Time	Brief Activities		
	Please refer to the Attachments 3 and 4 for "HSN Readiness Test for Exchange Participants (HKATS) 31 August 2019" and "HSN Readiness Test on 31 August 2019 Information Package for HKCC / SEOCH Participants" respectively.		
	Market Data Systems: OMD-C, OMD-CC, OMD-D and/or IIS test(s)		
	Please verify all subscribed OMD multicast groups as well as the retransmission (RTS) unicast connectivity.		
	For IIS, please perform logon test.		
	China Stock Connect : CCCG logon test		
	Only allow to perform logon test, kindly use the assigned Comp ID(s) and password " Ab123456 " to perform logon.		
Phase 3: Replace the Se	Phase 3: Replace the Secondary HSN network switches		
6:00p.m. to 7:00p.m.	Migration of Secondary HSN by HKEX, no testing activity for HSN subscribers		
7:00p.m. to 8:00p.m.	HSN subscribers participate the same test(s) as in Phase 2. Please refer to the arrangement of Phase 2.		

3. HSN Commissioning Test (optional) on 31 August 2019

Date/Time	Brief Activities	
HSN Commissioning Test (optional)		
8:00p.m. to 9:00p.m.	HSN Commissioning Test (optional)	
	HSN subscribers could take the HSN Commissioning Test if necessary. HSN subscribers who did not participate the HSN Commissioning Test in the HSN Connectivity Test held on 27 th July 2019 are recommended to take the HSN Commissioning Test.	
	The "HSN Network Commissioning Test Plan for New HSN" will be sent to the subscriber after the submission of the completed "Participation Form of HSN Readiness Test on 31 August 2019" to HKEX Hosting Service Desk.	

After the HSN Readiness Test, HSN will be fallback to the Original HSN network.



4. HSN Fallback Verification (optional) on 1 September 2019

Date/Time	Brief Activities		
HSN Fallback Verification	SN Fallback Verification (optional)		
9:00a.m. to 10:30a.m.	HSN subscribers participate in the below tests, if applicable		
	Cash Market HSN Fallback Verification Test		
	Derivatives Market HSN Fallback Verification Test		
	Market Data Systems HSN Fallback Verification Test		
	HSN subscribers are encouraged to perform production health check to the respective Cash, Derivatives and Market Data Systems.		
	China Stock Connect HSN Fallback Verification Test		
	Only allow to perform logon test, kindly use the assigned Comp ID(s) and password " Ab123456 " to perform logon.		
	*Kindly be reminded that during the HSN Fallback Verification Test, there is no HKEX support for Cash Market and China Stock Connect . As such, unlock OCG/CCCG session or check the connectivity status cannot be handled. For those BSS which are not going to participate in the HSN Fallback Verification Test, please ensure that each of these BSS is not connected to the OCG/CCCG session to avoid receiving the testing data.		

5. Submit the completed Attachment 5 "HSN Readiness Test Result Confirmation Form" by fax or email <u>at or before 6:00p.m. on 2 September 2019</u> to HKEX Hosting Service Desk (Fax No.: (852) 2462 0722 Email: hsservicedesk@hkex.com.hk).



6. Typhoon and / or Rainstorm Arrangements on 31 August and 1 September 2019

When Tropical Storm Warning Signal No. 8 (or above) or the Black Rainstorm Warning Signal is hoisted, the following arrangements will apply:

31 August 2019	1 September 2019	Arrangement
If either of the signals is	· ·	
hoisted or to be in force	hoisted or to be in force	Verification Test will be cancelled
anytime from 12:00p.m. to 2:00p.m.	anytime from 7:00a.m. to 9:00a.m.	and will not be resumed for the rest of the day.
If Tropical Storm Warning	If Tropical Storm Warning	
Signal No. 8 or above is hoisted after 2:00p.m.	Signal No. 8 or above is hoisted after 9:00a.m.	Verification Test will be terminated 15 minutes thereafter.
noisted after 2.00p.m.	noisted after 9.00a.m.	13 minutes thereafter.
If Black Rainstorm Warning	•	
Signal is issued after 2:00p.m.	Signal is issued after 9:00a.m.	Verification Test will continue until completion.
2.00μ.π.	9.00a.iii.	completion.

7. Please be reminded the following <u>tentative</u> schedule of other activities of Hardware Replacement:

Date (Tentative)	Brief Activities
Saturday, 28 September 2019	HSN Production Cutover Phase 1: replace the HSN firewalls
Saturday, 5 October 2019	HSN Production Cutover Phase 2: replace the Primary HSN network switches Replace NTP network switches – Batch 1
Saturday, 12 October 2019	HSN Production Cutover Phase 3: replace the Secondary HSN network switches Replace NTP network switches – Batch 2
Sunday, 13 October 2019 to Friday, 25 October 2019	Stabilisation period



8. Important Reminder

- Under exceptional circumstances, such as severe transportation incident...etc., HKEX-Hosting will inform the contact(s) as provided by HSN subscribers in their submitted "Participation Form of Readiness Test on 31 August 2019" by email and/or SMS as soon as possible if the HSN Readiness Test / Fallback Verification Test would be cancelled.
- In the period between the completion of HSN Production Cutover Phase 2 and starting of Phase 3, as the Primary HSN network switches have been replaced and are estimated to have around 1 microsecond enhancement over the Secondary HSN network switches (to-bereplaced in Phase 3), HSN subscribers may experience a latency difference between the Primary and Secondary HSN, for example on Orion Market Data feeds disseminated.
- Due to the Hardware Replacement, new HSN provisioning and HSN reconfiguration services will NOT be offered from the successful completion of HSN Readiness Test to the end of stabilisation period, i.e. from 2 September to 25 October 2019 (both dates inclusive), tentatively.
- All messages disseminated from Market Data Systems during the test period should be treated as non-production data and have to be cleaned up afterwards.

Subscribers are highly recommended to coordinate with your IT teams and/or system vendors for necessary preparation. For any enquiries, please contact the Hosting Service Desk at 2211 6080 or email hsservicedesk@hkex.com.hk.

Hosting Services
Information Technology Division

This circular has been issued in the English language with a separate Chinese language translation. If there is any conflict in the circulars between the meaning of Chinese words or terms in the Chinese language version and English words in the English language version, the meaning of the English words shall prevail.