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通告 CIRCULAR

Subject: Rollout Status Update of HKATS Risk Functions Enhancement - Pre-Trade

Risk Management ("PTRM") System Enhancement in Derivatives Market

Enquiry: HKATS Hotline¹ Tel: 2211-6360

Reference is made to the circular dated 8th October 2021 (Ref: MO/DT/219/21). Hong Kong Exchanges and Clearing Limited ("HKEX") is pleased to announce that the Pre-Trade Risk Management System Enhancement ("PTRM 2.0") will be on schedule to rollout on Monday, 1st November 2021.

Rollout Status Update to the Derivatives Market (30th October 2021 to 1st November 2021)

HKEX will keep all Exchange Participants ("EPs") informed about the rollout status of PTRM 2.0 in the PTRM Web Corner at HKEX Website below:

https://www.hkex.com.hk/Services/Trading/Derivatives/Overview/Trading-Mechanism/Pre-Trade-Risk-Management-(PTRM)-System-in-Derivatives-Markets?sc_lang=en

¹ All calls to the HKATS hotline would be recorded. Please refer to the following link for HKEX privacy policy statement: http://www.hkex.com.hk/Global/Exchange/Privacy-Policy?sc_lang=en



All EPs can access the PTRM Web Corner over the weekend and before the market opens on 1st November 2021 for the following rollout status information:

Scheduled Rollout Date	heduled Rollout Date Status Update Status Description	
	"On Schedule"	The system upgrade regarding the rollout of PTRM 2.0 is proceeding on schedule
1 st November 2021 (Monday)	"Success"	The system upgrade regarding the rollout of PTRM 2.0 is completed successfully and PTRM 2.0 is ready for rollout on 1st November 2021
("Fallback"	The system upgrade regarding the rollout of PTRM 2.0 is discarded due to an unlikely event of major problem. The current version of PTRM will continue to be deployed on 1st November 2021

Reminder for PTRM 2.0 Rollout

To ensure a smooth rollout of PTRM 2.0 and system stability, all EPs are required to take note of the following arrangements and act accordingly:

#	Date and Time	Event	Detail
1	30 th October 2021 (Saturday) 4:00 pm to 6:00 pm	Optional Connectivity Session	 Reference is made to the circular dated 8th October 2021 (Ref: MO/DT/219/21). EPs who registered for the Connectivity Session can login HKATS with PTRM Graphical User Interfaces ("PTRM GUIs"), HKATS Online applications and/ or OMnet Application Program Interface ("OAPI") programs to verify their production connectivities in PTRM 2.0 version of HKATS
2	31 st October 2021 (Sunday) Around 9:00 am	Confirmation of PTRM 2.0 Rollout by HKEX	 HKEX will confirm the rollout of PTRM 2.0 by updating the rollout Status into "Success" at the PTRM Web Corner If there is an unlikely event of major problem during the system upgrade and a fallback into the current version of PTRM is needed, HKEX will inform all EPs by updating the rollout Status into "Fallback" at the PTRM Web Corner Regardless the rollout status, all EPs shall delete all JAVA caches before logging into their PTRM GUIs on Monday, 1st November 2021



3	1 st November 2021 (Monday)	HKATS Login	Please refer to Appendix 1 for details about the procedures of JAVA cache deletion and PTRM system login • All EPs shall use their existing PTRM GUI login IDs and passwords to login the PTRM system after deleting all the JAVA caches of the
	Before Market Opens		previous version before the market opens on 1st November 2021 regardless the rollout status. There is no version change on OAPI programs due to the rollout of PTRM 2.0. All EPs shall use their existing OAPI login IDs and passwords to login their OAPI sessions on 1st November 2021 regardless the rollout status
3	1 st November 2021 (Monday) to 12 th November 2021 (Friday, 4:30 pm)	Two-Week Stabilization Period	Upon a successful rollout, there will be a Two- Week Stabilization Period. During the Stabilization Period, fallback procedures will be in place. Please refer to <u>Appendix 2</u> for the Checklist For Stabilization Period and details for the Fallback Arrangement
4	15 th November 2021 (Monday) to 14 th February 2022 (Monday)	Three-Month Calibration Period	• After the Stabilization Period, a 3-month "Calibration Period" will be allowed for all EPs to set up their risk limits for the new Prescribed Risk Control – Execution Throttle Limits. All PTRM risk limits and settings of the current version, namely, Maximum Order Size Limits, Maximum Order Rate Limit, Maximum Intraday Exposure Limits and Email Alerts will all be retained and migrated into PTRM 2.0. PTRM Utilization Reports ("RX_UTIL") will continue to be provided through Report Retrieval Solution ² to assist all Clearing Participants ("CPs") and their respective PTRM Risk Limit Managers to determine the appropriate risk limits with their EPs. EPs shall have a full assessment with their CPs and are requested to submit a notification with the newly proposed risk limits to HKEX before applying the new risk limits for the first time. Details of the arrangement will be announced in due course after the Stabilization Period.

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 $^{^{\}rm 2}$ For details about Report Retrieval Solution, please refer to DCASS User Guide



For any enquiries, please contact HKATS Hotline at 2211 6360 or email to hkatssupport@hkex.com.hk.

Sanly Ho Co-Head Trading Department Operations 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.



Appendix 1

	Procedure	Training Session		
		Material ³		
		Reference		
	JAVA Cache Deletion			
1.	Use the PTRM dedicated PC and go to Control Panel then select "Programs"	Page 9		
2.	Select "Java" from the list of programs			
3.	In the "General" tab, select "View…" under Temporary Internet Files			
4.	Select all existing "Genium INET TradeGuard" caches then press the red "X" button for deletion			
	Login PTRM GUI after deleting JAVA Cache			
1.	Use the PTRM dedicated PC and launch the Google Chrome browser	Page 12		
2.	Type in the URL box with your pre-assigned PTRM GUI gateway and port to access the PTRM gateway. Click on the screen icon to start downloading the latest PTRM GUI Application			
3.	Login the PTRM system using the existing PTRM GUI login ID and password			

³ Training Session Materials: <a href="https://www.hkex.com.hk/-/media/HKEX-Market/Services/Trading/Derivatives/Trading-Mechanism/Pre-Trade-Risk-Management-(PTRM)-System-in-Derivatives-Markets/Training-Session-Materials.pdf?la=en



Appendix 2

Checklist for Stabilization Period

Items to be checked and noted $\sqrt{}$		
Production Rollout and During the Stabilization Period, 1 st to 12 th November, 2021		
1.	Delete all JAVA caches from the previous version to login to PTRM 2.0	
	2. Login PTRM GUI(s) with the assigned gateway hostname(s) and port(s)	
	into PTRM 2.0	
2.	Check all the data shown in the PTRM GUI is correctly set:	
	All Pre Trade Limit Group ("PTLG") settings and risk limits from the	
	previous version are migrated into PTRM 2.0 including the:	
	- PTLG structures and Trading ID assignments	
	- Email alert settings	
	- Maximum Intraday Exposure Limits	
	- Maximum Order Size Limits	
	- Maximum Order Rate Limit	
	All new risk limits are set at their maximum values - 922,337,203,685,477	
	including the Execution Throttle Limits, Intraday Position Limits and	
	Maximum Block Trade Size Limits	
	EPs can modify the risk limits according to their needs if applicable	
3.	Fallback arrangement will only be applicable during the Stabilization	
	Period. EPs shall not perform the following PTRM actions during the	
	Stabilization Period due to their incompatibility to the previous version:	
	To delete all Product Tradables in a PTLG	
	To create more than 200 Product Tradables in a PTLG	
	Changes will be requested to revert if anyone of the PTRM actions	
	above is performed during the Stabilization Period	
	After the Stabilization Period, EPs can perform the two PTRM actions	
	stated above	



Fallback Arrangement

The fallback procedures are only applicable during the stabilization period, i.e., the first two weeks after the PTRM upgrade from 1st November, 2021 to 12th November, 2021. In the event of any critical issues arising, HKEX will investigate the cause and try to rectify the situation by all available means including to disable the PTRM system for localized PTRM issues. After the PTRM system being disabled:

- 1) Normal trading in HKATS can continue; and
- 2) No PTRM functions will be available to HKATS until further notice

In case that it is necessary to fallback, for example, if the incident cannot be resolved after disabling the PTRM system, HKEX will switch HKATS (including both the trading and PTRM systems) to the previous version internally and inform all EPs upon the completion of the switching process. The fallback procedures are estimated to take about 3 hours to complete. Subject to the triggering time of the fallback procedures, the trading and clearing services may be suspended for the remaining trading hours of the day.

1. Communication channels in case of fallback

EPs will be informed once the fallback decision is made and upon completion of the switching process. The fallback schedule, estimated resumption time of the previous HKATS version and the opening schedules of all markets will be communicated through HKATS Market Messages, and other available communication channels.

2. EP arrangement

Once the fallback is completed, EPs shall login to HKATS Online and/ or OAPI programs⁴, DCASS Online and/ or OAPI programs and PTRM GUIs again. There will be no change in the login IDs and passwords due to the fallback. Existing login IDs and passwords shall be used.

⁴ There is no version change on OAPI programs due to the rollout of PTRM 2.0



After the fallback, PTRM 2.0 will be switched back into its previous version. EPs shall use the existing PTRM GUI login IDs and passwords to log into their PTRM GUIs again after deleting all PTRM 2.0 JAVA caches.

3. Actions to be taken after fallback

i. Establishment of Connections to HKATS and DCASS

Once fallback has been completed, HKEX will immediately notify all EPs. All EPs should login to HKATS with HKATS Online and/ or OAPI programs.

After logging into HKATS, EPs should check information through the Market Message Window to retrieve the following information from HKEX:

- Schedule of market openings
- Notice of any special arrangement for trading on HKATS; and
- Other important market information

ii. Establishment of Connections to the PTRM system

Once the fallback has been completed, HKEX will immediately notify all EPs. All EPs can login to the PTRM system with PTRM GUIs and verify that:

- All PTRM 2.0 functions are removed after the fallback
- All risk limits for the functions of the previous version remain after the fallback
- All PTLG and email settings before the fallback are retained after the fallback
- All order and trade exposures for Maximum Intraday Exposure Limits before the fallback,
 will be reset to zero to start anew after the fallback
- A stopped or blocked PTLG before the fallback is unstopped or unblocked after the fallback unless the relevant Maximum Intraday Exposure Limits or the Maximum Order Rate Limits are set at 0 before the fallback. If the EP wants to stop a PTLG from trading after the fallback, the EP can manually stop it by using the PTRM Stop Button after the fallback



iii. Validation of Trades Executed

In order to ensure the accuracy of information for trades that were executed prior to and after the fallback, EPs should validate all trades upon fallback completion via the HKATS Online, DCASS Online and OAPI programs.

Order book will be emptied after the fallback with no outstanding order after logging in by HKATS Online or OAPI programs.

4. Enquiries

For any enquiries about the fallback procedures, EPs can contact HKATS Hotline at 2211 - 6360.



5. Checklist for Fallback

Items t	o be checked	$\sqrt{}$
1.	Pay attention to HKATS Market Messages, Exchange News, Market	
	System Status and/ or other available communication channels for the	
	possible fallback announcements made by HKEX	
2.	Upon resumption of HKATS after the fallback, EPs should use existing	
	login IDs and passwords to login to HKATS with HKATS Online and/ or	
	OAPI programs, to DCASS with DCASS Online and/ or OAPI programs,	
	and to the PTRM system with PTRM GUIs after deleting all JAVA caches	
3.	After logging into HKATS and DCASS after the fallback, EPs should	
	validate all trades executed before the fallback and verify that the	
	order book is empty with no outstanding order	
4.	After logging into the PTRM system after the fallback, EPs can verify	
	that:	
	All PTRM 2.0 functions are removed after the fallback	
	2) All risk limits for the functions of the previous version remain after the	
	fallback	
	3) All PTLG and email settings before the fallback are retained after the	
	fallback	
	4) All order and trade exposures for Maximum Intraday Exposure Limits	
	before the fallback, will be reset to zero to start anew after the fallback	
	5) A stopped or blocked PTLG before the fallback is unstopped or	
	unblocked after the fallback unless the relevant Maximum Intraday	
	Exposure Limits or the Maximum Order Rate Limits are set at 0 before	
	the fallback. If the EP wants to stop a PTLG from trading after the	
	fallback, the EP can manually stop it by using the PTRM Stop Button	
	after the fallback	