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## 通告 CIRCULAR

Subject: **Rollout of HKATS Risk Functions Enhancement – Pre-Trade Risk Management (“PTRM”) System Enhancement in Derivatives Market**

Enquiry: **HKATS Hotline<sup>1</sup> Tel: 2211-6360**

Reference is made to the circular dated 26<sup>th</sup> August 2021 (Ref: [MO/DT/189/21](#)). Following the successful completion of the Market Rehearsal (“MR”) and confirmations of readiness from the Exchange Participants (“EPs”), Hong Kong Exchanges and Clearing Limited (“HKEX”) is pleased to announce that the Pre-Trade Risk Management System Enhancement (“PTRM 2.0”) will be scheduled to rollout on **Monday, 1<sup>st</sup> November 2021**.

### **Connectivity Session (30<sup>th</sup> October 2021)**

A connectivity session is scheduled on **Saturday, 30<sup>th</sup> October 2021 between 4:00 p.m. and 6:00 p.m.** EPs are highly recommended to participate to verify the connectivity of their PTRM Graphical User Interface (“PTRM GUI”), OAPI programs and/ or HKATS Online applications using the existing production infrastructure, network connection and PC settings that have been verified in the MR. Please complete the online registration form on or before Friday, 22<sup>nd</sup> October 2021. Successful registrations will be confirmed by emails along with the finalized details in due course.

Date	Time	Format	Registration
30 <sup>th</sup> October 2021 (Saturday)	4:00 pm - 6:00 pm (Tentative)	Connectivity Session	<a href="#">Click here to register</a>

<sup>1</sup> 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](http://www.hkex.com.hk/Global/Exchange/Privacy-Policy?sc_lang=en)

**Stabilization Period (1<sup>st</sup> November 2021 – 12<sup>th</sup> November 2021)**

**EPs are reminded to delete all JAVA caches before logging into PTRM 2.0 before the market open on 1<sup>st</sup> November 2021.** Any attempt to login PTRM 2.0 without deleting JAVA caches of the previous version will be unsuccessful to launch the application. There will be a 2-week Stabilization Period. EPs are requested to note the checklist items during the Stabilization Period as set out in **Appendix 1.**

During the Stabilization Period, in the unlikely situation that the upgraded PTRM software encounters irreparable incidents which affect normal trading in HKATS, HKEX may disable the PTRM system to restore normal trading in the derivatives markets. However, if the incidents cannot be resolved after the PTRM system having been disabled, HKEX may, as a last resort, trigger a fallback procedure to revert to the previous version of HKATS (including both the trading and PTRM system) in order to resume the trading and clearing services for the derivatives markets. All emergency announcements will be made through HKATS Market Messages and other available communication channels. Please note that the fallback arrangement will only be applicable during the Stabilization Period. A detailed fallback arrangement is set out in **Appendix 2.**

**Setting up risk limits for the new Prescribed Risk Control**

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<sup>2</sup> 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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<sup>2</sup> For details about Report Retrieval Solution, please refer to DCASS User Guide

EPs can find other PTRM related information in the PTRM Web Corner at HKEX Website:

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

For any enquiries, please contact HKATS Hotline at 2211 6360 or email to [hkatssupport@hkex.com.hk](mailto:hkatssupport@hkex.com.hk).

The Exchange would like to thank all EPs for their participations in all the tests and their supports to the rollout of PTRM 2.0 for the derivatives markets.

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**

**Checklist For Stabilization Period**

Items to be checked and noted		√
<b>Production Rollout and During the Stabilization Period, 1<sup>st</sup> to 12<sup>th</sup> November, 2021</b>		
1.	<ul style="list-style-type: none"> <li>• Delete all JAVA caches from the previous version to login to PTRM 2.0</li> <li>• Login PTRM GUI(s) with the assigned gateway hostname(s) and port(s) into PTRM 2.0</li> </ul>	
2.	<p>Check all the data shown in the PTRM GUI is correctly set:</p> <ul style="list-style-type: none"> <li>• All Pre Trade Limit Group (“PTLG”) settings and risk limits from the previous version are migrated into PTRM 2.0 including the:               <ul style="list-style-type: none"> <li>- PTLG structures and Trading ID assignments</li> <li>- Email alert settings</li> <li>- Maximum Intraday Exposure Limits</li> <li>- Maximum Order Size Limits</li> <li>- Maximum Order Rate Limit</li> </ul> </li> <li>• 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</li> <li>• EPs can modify the risk limits according to their needs if applicable</li> </ul>	
3.	<p>Fallback arrangement will only be applicable during the Stabilization Period. <b><u>EPs shall not perform the following PTRM actions during the Stabilization Period</u></b> due to their incompatibility to the previous version:</p> <ul style="list-style-type: none"> <li>• To delete all Product Tradables in a PTLG</li> <li>• To create more than 200 Product Tradables in a PTLG</li> </ul> <p><b>Changes will be requested to revert if anyone of the PTRM actions above is performed during the Stabilization Period</b></p> <p>After the Stabilization Period, EPs can perform the two PTRM actions stated above</p>	

**Appendix 2**

**Fallback Arrangement**

The fallback procedures are only applicable during the stabilization period, i.e., the first two weeks after the PTRM upgrade from 1<sup>st</sup> November, 2021 to 12<sup>th</sup> 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 programs<sup>3</sup>, 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.

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

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<sup>3</sup> There is no version change on OAPI programs due to the rollout of PTRM 2.0

- 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 to be checked		√
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: <ol style="list-style-type: none"> <li>1) All PTRM 2.0 functions are removed after the fallback</li> <li>2) All risk limits for the functions of the previous version remain after the fallback</li> <li>3) All PTLG and email settings before the fallback are retained after the fallback</li> <li>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</li> <li>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</li> </ol>	