# HKATS Data Centre Failover Rehearsal Information Package For Exchange Participants

(19 August 2023)

Version 1.00

Issue Date: 28 July 2023

# **Table of Content**

1	INTRO	DDUCTION	3
2	SCOPI	E AND OBJECTIVES	3
	2.1 2.2 2.2.1 2.2.2 2.2.3 2.2.4 2.2.5	REHEARSAL OBJECTIVES	3 4 4
3	COMP	PLIANCE	
4	PART	ICIPANTS REQUIREMENTS	6
5	DO'S A	AND DON'TS	7
6	HELP	DESK	7
7	НКАТ	S DATA CENTRE FAILOVER REHEARSAL	8
	7.1 7.2 7.3 7.4	DATE AND TIME TABLE	9 9
8	TYPH	OON, EXTREME CONDITIONS AND BLACK RAINSTORM ARRANGEMENT	11
	8.1 8.2	TYPHOON AND EXTREME CONDITIONS ARRANGEMENT	
9	EP CO	MMUNICATION CHANNELS	11
Al	PPENDIX	X A: REHEARSAL CHECKLIST	12
Al	PPENDIX	X B: HKATS DATA CENTRE FAILOVER REHEARSAL DETAILED RUNDOWN	13
Al	PPENDIX	CONFIDMATION FORM	- 10

## 1 Introduction

The central system of HKATS is built on a fully redundant system architecture with automatic failover facility. It is able to recover automatically in the event of system failure. However, trading activities may be temporarily suspended if such automatic procedures cannot be started up and HKATS will be recovered by HKATS data centre failover procedure.

Hong Kong Exchanges and Clearing Limited ("HKEX") is conducting a HKATS Data Centre Failover Rehearsal ("the Rehearsal") to provide an opportunity for Exchange Participants to familiarize with the contingency procedures under such emergency situation. The Rehearsal simulates the conditions on data centre failover of derivatives trading and clearing systems. The rehearsal will also cover the data centre failover of other systems of HKEX group.

Exchange Participants ("EPs") are required to input test trades into HKATS according to the Detailed Rundown (Appendix B) and verify all trade details after the failover.

The results of the Rehearsal will be reviewed in detail. Participants who join the Rehearsal are required to return their confirmation within one hour after the Rehearsal.

## 2 Scope and Objectives

# 2.1 Rehearsal Objectives

The main objective of the Rehearsal is to provide an opportunity for Exchange Participants to familiarize with the contingency procedures in case of HKATS data centre failover.

# 2.2 Scope

The scope of this Rehearsal includes:

- Network Connectivity
- Day Session
- Data Centre Failover
- Resumption of Trading during Day Session
- After-Hours Trading (T+1) Session

## 2.2.1 Network Connectivity

This activity ensures that the network connectivity of Participants to HKEX is in good order. HKEX will provide on-line sessions for Participants to login and perform HKATS and DCASS functions via all participant circuits.

## 2.2.2 Day Session

This session allows HKATS users to input orders and perform order execution transactions. Participants are required to follow the Detailed Rundown (Appendix B) and input a prescribed number of transactions. It also allows HKATS Risk Functions Graphical User Interface ("PTRM GUI") users to perform PTRM GUI functions.

## 2.2.3 Data Centre Failover

This activity verifies the failover process in the unlikely event of emergency situation occurred and also to ensure the smooth operation of various derivatives systems after the data centre failover of HKATS. To ensure Exchange and Clearing Participants' systems can still be connected and running as normal after the transition from primary data centre to secondary data centre, a failover session is arranged between the two sessions. Participants' order book will be emptied after the failover, and therefore they are required to re-input the orders if needed.

# 2.2.4 Resumption of Trading during Day Session

After the failover, Participants are required to re-logon the HKATS Online, OMnet Application Programme Interface ("OAPI") and PTRM GUI. Participants should log in to these applications through pre-assigned central gateways and ports of the secondary HKEX data centre.

A 20-min Pre-Market Opening session will be available in applicable markets before the markets resume after failover.

The market re-opening times of stock futures and options markets will be 15 minutes later than other derivatives markets after the failover. This is to synchronize the re-opening times with the underlying cash markets.

Participants are required to input prescribed number of orders and transactions into HKATS and DCASS to simulate the situation and verify the entries after the failover. PTRM GUI users are recommended to perform PTRM functions.

## 2.2.5 After-Hours Trading Session

Applicable markets will move to After-Hours Trading Session after the close of the day session. This is to ensure EPs' systems are able to run a full trading day cycle after the failover.

## 3 Compliance

In order to achieve the Rehearsal objectives, it is imperative that Participants follow the Rehearsal Checklist and Detailed Rundown as stipulated in Appendix A and Appendix B. This will facilitate the Exchange staff to monitor the activities during the Rehearsal and provide a seamless flow of operations with the help of the Rehearsal Checklist and Detailed Rundown. In particular, staff of the Participants who will be involved in the Rehearsal should familiarize themselves with the requirements and procedures prior to participating in the Rehearsal.

In addition, it is advisable to maintain a proper audit trail in respect of each transaction input during the Rehearsal in accordance with the policy currently adopted by the Participants. Responsible Officer(s) or his/her designate of each participating EP should be present during the Rehearsal to supervise the process and to be responsible for relaying any issues arising during the Rehearsal to the Exchange. If this arrangement is not practicable (e.g. the Responsible Officer will be out of town during the Rehearsal), the participating EP should arrange for an appropriate senior staff to assume the role of the Responsible Officer. In any event, it is recommended that internal communications such as internal briefing should be held by each Participant prior to the Rehearsal to ensure that (1) staff involved fully understands all the requirements and procedures and (2) proper arrangements have been put in place by the Participants to comply with the requirements.

# 4 Participants Requirements

In order to be ready for the Rehearsal, all EPs have to meet the following requirements:

- 1. The HKATS Online workstation meets the minimum Genium configuration with Google Chrome browser as communicated to EPs;
- 2. A dedicated PC in place for PTRM GUI connection that meets the minimum configuration as communicated to Participants;
- 3. Certified OAPI applications for EPs who wish to participate through their OAPI applications; and
- 4. EPs' staff who will take part in the Rehearsal must have been trained and accredited in the operation of HKATS, the HKATS Online workstation and the PTRM GUI.

## 5 Do's and Don'ts

## Do's

- 1. Backup production data prior to the Rehearsal;
- 2. Delete the Java caches of HKATS Risk Function GUIs before and after the Rehearsal;
- 3. Login to HKATS as early as possible after 11:15 a.m. on day of the Rehearsal;
- 4. Ensure that the proper version of OAPI is used for the Rehearsal;
- 5. Ensure that the Checklist (Appendix A) of the Rehearsal is properly followed;
- 6. Ensure proper communication channel between the Exchange and trading operation before the Rehearsal.
- 7. Backup all relevant log files for subsequent review and make sure all testing data will not be carried forward;
- 8. Fill in and return the confirmation form to the Exchange through fax or email within one hour after the end of the Rehearsal.

## Don'ts

- 1. Do not reboot or shut down your dedicated PC for HKATS Online workstation or PTRM GUI even if it appears to be "hanging". Please call the HKATS Hotline (2211-6360) immediately in this regard; and
- 2. Do not attempt to rectify the problem by closing any window, terminating any application programs, etc. Any such attempt would complicate rather than assist the problem diagnosis.

# 6 Help Desk

The Exchange Help Desk will respond to all EPs' inquiries during the Rehearsal. Detail is as follows:

HKATS Hotline: 2211-6360

# 7 HKATS Data Centre Failover Rehearsal

# 7.1 Date and Time Table

<u>The system date will be set as 19 August 2023</u>. HKATS Participants are requested to make available at least one HKATS Online workstation or one OAPI application per participated central gateway in order to take part in the Rehearsal and a dedicated PC for PTRM GUI connection.

The time table and tasks which EPs are expected to do are as follows:

Date: 19 August 2023			
SESSION	PHASES	TIME FRAME	TASKS
1st Trading Session	Imolo		1/10/10
Login to HKATS		11:15 – 11:45	Refer to Section 1-1 of Appendix B
Session 1	Pre-Opening	11:45 – up to	Refer to Section 1-2 of Appendix B
Day Session ~ Pre-	1 0	11:56	
Market Opening Period	Pre-Open	After cutoff –	Refer to Section 1-3 of Appendix B
(HSI, MHI, HHI,	Allocation	up to 11:58	
MCH, HTI, MCA,	Open Allocation	After cutoff –	Refer to Section 1-4 of Appendix B
MTW, MWN, TWP &		12:00	
TWN Futures only)			
Session 1	Open	12:00 – 12:15	Refer to Section 1-5 of Appendix B
Day Session ~ Open			
Trading Session			
(except Stock Options and Stock Futures)			
Session 1	Open	12:00 – 12:15	Refer to Section 1-6 of Appendix B
Day Session ~ Open	Open	12.00 – 12.13	Refer to Section 1-0 of Appendix B
Trading Session (Stock			
Options and Stock			
Futures)			
	Pause	12:15 – 12:30	Simulate contingency situation
			occurred at HKEX's Primary Data
			Centre
		EX's Secondary D	Pata Centre
	(	12:30 – 13:10)	
2 <sup>nd</sup> Trading Session			
Login to HKATS		13:10 – 13:25	Refer to Section 2-1 of Appendix B
Session 2	Pre-Opening	13:25 – up to	Refer to Section 2-2 of Appendix B
Day Session ~ Pre-		13:41	
Market Opening Period			
(HSI, MHI, HHI,	Pre-Open	After cutoff –	Refer to Section 2-3 of Appendix B
MCH, HTI, MCA,	Allocation	up to 13:43	
MTW, MWN, TWP & TWN Futures only)			
1 WIN Futures Offiy)	Open Allocation	After cutoff –	Refer to Section 2-4 of Appendix B
	•	13:45	

Session 2 Day Session  ~ Open Trading Session (except Stock Options and Stock Futures)	Open	13:45 – 15:15	Refer to Section 2-5 of Appendix B
Session 2 Day Session  ~ Open Trading Session (Stock Options and Stock Futures)	Open	14:00 – 15:00	Refer to Section 2-6 of Appendix B
Session 2 Day Session (Stock Options and Stock Futures)	Close	15:00	
Session 2 Day Session	Close	15:15	
AHT Session	AHT_Inact_T_ Order	15:17 – 15:19	Refer to Section 3-1 of Appendix B
	AHT_Pre_Mkt_ Act	15:19 – 15:29	
AHT Session~ Open Trading Session	AHT_Next_Day AHT Open	15:29 – 15:30 15:30 – 16:00	Refer to Section 3 -2 of Appendix B
AHT Session~ Market Close	AHT Close	16:00	
End of Rehearsal	Dayend	16:15	Fax or email Confirmation Form (Appendix C) to HKEX before <u>17:15</u>

HKEX Restore HKATS Production							
Date: 20 August 2023	Date: 20 August 2023 Post-Rehearsal Health Check (Production Connectivity) – <b>Optional</b>						
SESSION PHASES TIME FRAME TASKS							
EP Login (Optional) 01:00 – 03:00 Refer to Section 4-1 of Appendix B							

## 7.2 Rehearsal Checklist and Rehearsal Detailed Rundown

All users participating in the Rehearsal are required to perform all action items detailed in the Rehearsal Checklist and Rehearsal Detailed Rundown. Please refer to Appendix A and Appendix B for details.

# 7.3 HKATS Logon ID & Password

Each Participant will use the production HKATS username as in the production environment as at 22 July 2023 and temporary password of "388testing\$" to login HKATS to perform the Rehearsal. Each HKATS username will have the same trading rights as in the production environment as at the same date.

Participants are advised to arrange sufficient time to perform and complete connectivity procedures before the start of trading session of the Rehearsal.

# 7.4 Rehearsal Evaluation

All Participants are requested to fill in the Confirmation Form that are set out in Appendix C; and return them to the Exchange by fax or email before the prescribed deadline upon the completion of the Rehearsal. Only ONE confirmation form is required for each Exchange Participant.

#	Rehearsal Date	Deadline for Returning Confirmation Form
Rehearsal	19 August 2023	19 August 2023, 17:15

# 8 Typhoon, Extreme Conditions and Black Rainstorm Arrangement

## 8.1 Typhoon and Extreme Conditions Arrangement

- 1. If Typhoon Signal No. 8 (or above) or Extreme Conditions is remained at 7:00 a.m. or the HK Observatory pre-announced at or before 7:00 a.m. that Typhoon Signal No. 8 (or above) will be issued at or before 12:00 noon on the day of Rehearsal, the Rehearsal will be cancelled and will not be resumed for the rest of the day.
- 2. In case Typhoon Signal No. 8 (or above) or Extreme Conditions is issued on or after 9:00 a.m. on the day of Rehearsal, the Rehearsal will be terminated 15 minutes thereafter.

## 8.2 Black Rainstorm Arrangement

- 1. If Black Rainstorm is remained at 7:00 a.m. on the day of Rehearsal, the Rehearsal will be cancelled and will not be resumed for the rest of the day.
- 2. In case Black Rainstorm is issued during the day of Rehearsal, the Rehearsal will continue as normal.

## **9 EP Communication Channels**

During the Rehearsal, HKEX will communicate with Participants via the Market Messages Window on HKATS

# **APPENDIX A: Rehearsal Checklist**

	Items to be checked	✓
(A)	Before the Rehearsal	
1	Have you read and understood this document ("HKATS Data Centre Failover Rehearsal Information Package for Exchange Participants")?	
2	Have you passed this document to your internal IT support team or system vendor and ensured that they would make follow-up action (if necessary)?	
3	Have you ensured that the HKATS username (as at 22 July 2023) and temporary password (reset to "388testing\$") are ready for use in the Rehearsal?	
4	If you would connect your HKATS OAPI in the Rehearsal, have you completed the certification process?	
5	Have you discussed with your clearing operation team about the coordination in preparation and execution of the Rehearsal?	
<b>(B)</b>	After the Rehearsal	
1	Have you submitted the Rehearsal Confirmation Form before 17:15?	

# APPENDIX B: HKATS Data Centre Failover Rehearsal Detailed Rundown

SECTION	TIME		ACTION	EXPECTED RESULTS/OBSERVATIONS
1-1 Login	11:15	11:45	<ul> <li>Login HKATS by using the HKATS username as of 22 July 2023 and password "388testing\$"</li> <li>Login PTRM GUI by using the Login ID as of 22 July 2023 and password "388testing\$"</li> </ul>	
	11:45		Pre-market Opening	Applies to EPs who have trading right in HSI, MHI, HHI, MCH, HTI, MCA, MTW, MWN, TWP & TWN futures markets.
1-2 Pre- Opening	11:45	Up to 11:56	<ul> <li>Enter 5 AO orders (either buy or sell) in HSIQ3 during PREOPEN</li> <li>Enter 2 limit orders (either buy or sell) at a price of 20000 in HSIQ3 during PREOPEN</li> <li>No action is required for EPs with Stock Options trading right only</li> </ul>	<ul> <li>Order information updated in Order Book window.</li> <li>Random cutoff from 11:55</li> </ul>
1-3 Pre-Open Allocation	After cutoff	Up to 11:58	No Action required	Random cutoff from 11:57
1-4 Open Allocation	After cutoff	12:00	No Action required	Orders matched during PAUSE will be updated in Trade History and Ticker windows.
Open	12:00		Market Open (except Stock options/futures)	
1-5 Open	12:00	12:15	Open Trading	Observations  TSS' field of Price Information window changes to OPEN after market open. (OPEN_DPL for HSI futures, HHI futures, MHI futures and MCH futures)

SECTION	Тіме		ACTION	EXPECTED RESULTS/OBSERVATIONS
1-5 (cont'd)	12:00	12:15	Enter a limit order (either bid at 19900 or ask at 20000) of 30 lots in HSIQ3     Execute 25 order transactions with 1 lot each in HSIQ3	<ul> <li>Order information updated in Order Book window.</li> <li>Price Depth and Order Depth window updated in accordingly.</li> <li>Trade History window updated accordingly.</li> <li>Price Information window updated accordingly.</li> </ul>
Open	12:00		Market Open (Stock options/futures)	
1-6 Open	12:00	12:15	Open Trading Requirement:  For EPs with Stock Options trading right only:  • Enter a limit order (either bid at 0.15 or ask at 0.25) of 30 lots in HKB60.00H3  • Execute 25 order transactions with 1 lot each in HKB60.00H3	<ul> <li>Observations</li> <li>'TSS' field of Price Information window changes to OPEN after market open.</li> <li>Order information updated in Order Book window.</li> <li>Price Depth and Order Depth window updated in accordingly.</li> <li>Trade History window updated accordingly.</li> <li>Price Information window updated accordingly.</li> </ul>
Pause	12:15	12:30	Simulate contingency situation occurred at HKEX's Primary Data Centre	
	12:30	13:10	Failover to HKEX's Secondary Data Centre	All applications will be logged out from HKATS and DCASS

SECTION	TIME		ACTION	EXPECTED RESULTS/OBSERVATIONS
2-1 Login	13:10	13:25	<ul> <li>Re-login to HKATS by using the HKATS username and password "388testing\$"</li> <li>(Users should connect pre-assigned central gateways and ports at the secondary HKEX data centre)</li> <li>Order book should be empty</li> <li>Verify all trade details executed before the failover</li> <li>Re-login to PTRM GUI by using the Login ID and password "388testing\$"</li> <li>(PTRM GUI users should connect preassigned central gateways and ports at</li> </ul>	All trade details are reloaded in the Trade History window.
			the secondary HKEX data centre)	
2-2 Pre- Opening	13:25	Up to 13:41	<ul> <li>Enter 5 AO orders (either buy or sell) in HSIQ3 during PREOPEN</li> <li>Enter 2 limit orders (either buy or sell) at a price of 20000 in HSIQ3 during PREOPEN</li> </ul>	<ul> <li>Order information updated in Order Book window.</li> <li>Random cutoff from 13:40</li> </ul>
2-3 Pre-Open Allocation	After cutoff	Up to 13:43	No Action required	Random cutoff from 13:42
2-4 Open Allocation	After cutoff	13:45	No Action required	Orders matched during PAUSE will be updated in Trade History and Ticker windows.
Open	13:45		Market Open (except Stock options/futures)	

SECTION	TIME		ACTION	EXPECTED RESULTS/OBSERVATIONS
2-5	13:45	15:15	Open Trading	Observations
Open			Enter a limit order of 30 lots (either bid at 19900 or ask at 20000) in HSIQ3     Execute 10 order transactions with 1 lot each in HSIQ3	
				Order Book window.     Price Depth and Order Depth window updated in accordingly.
				Trade History window updated accordingly.
				Price Information window updated accordingly.
Open	14:00		Market Open (Stock options/futures)	
2-6	14:00	15:00	Open Trading	<u>Observations</u>
Open			Requirement:  For EPs with Stock Options trading right only:	"TSS' field of Price Information window changes to OPEN after market open.
			Enter a limit order (either bid at 0.73 or ask at 0.83) of 30 lots in HKB60.00H3	Order information updated in Order Book window.
			Execute 25 order transactions with 1 lot each in HKB60.00H3	Price Depth and Order Depth window updated in accordingly.
				Trade History window updated accordingly.
				Price Information window updated accordingly.
Close	15:00		Market Close (Stock Options/futures)	"TSS' field of Price Information window changes to CLOSE
Close	15:15		<u>Market Close</u>	'TSS' field of Price Information     window changes to     CLOSE_TODAY /     CLOSE_TODAY_E for     instruments with AHT session.     Other instruments changes to     CLOSE.

SECTION	TIME		ACTION	EXPECTED RESULTS/OBSERVATIONS
	15:17	15:19	Orders without T+1 option enabled in AHT products will be inactivated	Orders for AHT products     WITHOUT T+1 option enabled     will be inactivated.
				Orders for AHT products WITH     T+1 option enabled will be carried     forwarded to T+1 session.
3-1	15:19	15:30	No Action required	• Nil
AHT Pre- Market Activities				
AHT Open	15:30		Market Open for AHT products	
3-2 AHT Open	15:30	16:00	<ul> <li>AHT Market Open</li> <li>Requirement:</li> <li>Enter a limit order (either bid at 19900 or ask at 20000) of 30 lots in HSIQ3</li> <li>Execute 25 order transactions with 1 lot each in HSIQ3</li> <li>No action is required for EPs who participate in day session only</li> </ul>	<ul> <li>'TSS' field of Price Information window changes to         AHT_OPEN_PL / AHT_OPEN         for instruments with AHT session.         Other instruments still remain as CLOSE.</li> <li>Order information updated in Order Book window.</li> <li>Price Depth and Order Depth window updated in accordingly.</li> <li>Trade History window updated accordingly.</li> <li>Price Information window updated accordingly.</li> </ul>
AHT Close	16:00		AHT Market Close	'TSS' field of Price Information     window changes to AHT_CLOSE     / AHT_CLOSE_E for instruments     with AHT session. Other     instruments show CLOSE.
	16:15		<ul> <li>Rehearsal End</li> <li>Logout HKATS</li> <li>Fax or email Confirmation Form (Appendix C) to HKEX before <u>17:15</u></li> </ul>	

SECTION	TIME			ACTION		EXPECTED RESULTS/OBSERVATIONS	
4-1	01:00	03:00	•	EP login HKATS production network for confirmation of system healthiness	•	User could logon successfully with production username and password	

# **APPENDIX C: Regular HKATS Data Centre Failover Rehearsal** (Rehearsal) – Confirmation Form

**To:** HKEX – Derivatives Trading Email: <a href="mailto:hkatssupport@hkex.com.hk">hkatssupport@hkex.com.hk</a> Fax: 2509-0724 / 2877-0017 Particulars of Exchange Participant Mnemonic / Firm ID Participant Name **Responsible Officer (or Designate)** Name Signature Phone Participants are requested to complete this form and return it to HKEX by 17:15 on 19 August 2023 (Saturday). The form should be completed by the individual(s) who took part in the Rehearsal and reviewed by a Responsible Officer. The evaluation will assist the Exchange to confirm the status of HKATS. Participants' cooperation will be much appreciated. We confirm that the Rehearsal has been **successfully conducted**. We encountered the following problem(s) during the Rehearsal: By returning this form, we consent to the processing of personal data in accordance with the Privacy Policy Statement.

#### **Privacy Policy Statement**

Hong Kong Exchanges and Clearing Limited, and from time to time, its subsidiaries (together the "Group") (and each being "HKEX", "we", "us" or "member of the Group" for the purposes of this Privacy Policy Statement as appropriate) recognise their responsibilities in relation to the collection, holding, processing, use and/or transfer of personal data under the Personal Data (Privacy) Ordinance (Cap. 486) ("PDPO"). Personal data will be collected only for lawful and relevant purposes and all practicable steps will be taken to ensure that personal data held by us is accurate. We will use your personal data which we may from time to time collect in accordance with this Privacy Policy Statement.

We regularly review this Privacy Policy Statement and may from time to time revise it or add specific instructions, policies and terms. Where any changes to this Privacy Policy Statement are material, we will notify you using the contact details you have provided us with and, where required by the PDPO, give you the opportunity to opt out of these changes by means notified to you at that time. Otherwise, in relation to personal data supplied to us through the HKEX website or otherwise, continued use by you of the HKEX website or your continued relationship with us shall be deemed to be your acceptance of and consent to this Privacy Policy Statement, as amended from time to time

If you have any questions about this Privacy Policy Statement or how we use your personal data, please contact us through one of the communication channels set out in the "Contact Us" section below

We will take all practicable steps to ensure the security of the personal data and to avoid unauthorised or accidental access, erasure or other use. This includes physical, technical and procedural security methods, where appropriate, to ensure that the personal data may only be accessed by authorised personnel.

Please note that if you do not provide us with your personal data (or relevant personal data relating to persons appointed by you to act on your behalf) we may not be able to provide the information, products or services you have asked for or process your requests, applications, subscriptions or registrations, and may not be able to perform or discharge the Regulatory Functions (defined below).

#### Purpose

From time to time we may collect your personal data including but not limited to your name, mailing address, telephone number, email address, date of birth and login name for the following purposes:

- $1.\ to\ process\ your\ applications,\ subscriptions\ and\ registration\ for\ our\ products\ and\ services;$
- to perform or discharge the functions of HKEX and any company of which HKEX is the recognised exchange controller (as defined in the Securities and Futures Ordinance (Cap. 571)) ("Regulatory Functions");
- 3. to provide you with our products and services and administer your account in relation to such products and services;
- 4. to conduct research and statistical analysis;
- 5. to process your application for employment or engagement within HKEX to assess your suitability as a candidate for such position and to conduct reference checks with your previous employers; and 6. other purposes directly relating to any of the above.

#### Direct marketing

Where you have given your consent and have not subsequently opted out, we may also use your name, mailing address, telephone number and email address to send promotional materials to you and conduct direct marketing activities in relation to HKEX financial services and information services, and financial services and information services offered by other members of the Group.

If you do not wish to receive any promotional and direct marketing materials from us or do not wish to receive particular types of promotional and direct marketing materials or do not wish to receive such materials through any particular means of communication, please contact us through one of the communication channels set out in the "Contact Us" section below. To ensure that your request can be processed quickly please provide your full name, email address, log in name and details of the product and/or service you have subscribed.

#### Identity Card Number

We may also collect your identity card number and process this as required under applicable law or regulation, as required by any regulator having authority over us and, subject to the PDPO, for the purpose of identifying you where it is reasonable for your identity card number to be used for this purpose.

#### Transfers of personal data for direct marketing purposes

Except to the extent you have already opted out we may transfer your name, mailing address, telephone number and email address to other members of the Group for the purpose of enabling those members of the Group to send promotional materials to you and conduct direct marketing activities in relation to their financial services and information services.

#### Other transfers of your personal data

For one or more of the purposes specified above, your personal data may be:

- transferred to other members of the Group and made available to appropriate persons in the Group, in Hong Kong or elsewhere and in this regard you consent to the transfer of your data outside of Hong Kong;
- 2. supplied to any agent, contractor or third party who provides administrative, telecommunications,

computer, payment, debt collection, data processing or other services to HKEX and/or any of other member of the Group in Hong Kong or elsewhere; and

3. other parties as notified to you at the time of collection.

#### How we use cookies

If you access our information or services through the HKEX website, you should be aware that cookies are used. Cookies are data files stored on your browser. The HKEX website automatically installs and uses cookies on your browser when you access it. Two kinds of cookies are used on the HKEX website:

Session Cookies: temporary cookies that only remain in your browser until the time you leave the HKEX website, which are used to obtain and store configuration information and administer the HKEX website, including carrying information from one page to another as you browse the site so as to, for example, avoid you having to re-enter information on each page that you visit. Session cookies are also used to compile anonymous statistics about the use of the HKEX website.

Persistent Cookies: cookies that remain in your browser for a longer period of time for the purpose of compiling anonymous statistics about the use of the HKEX website or to track and record user preferences.

The cookies used in connection with the HKEX website do not contain personal data. You may refuse to accept cookies on your browser by modifying the settings in your browser or internet security software. However, if you do so you may not be able to utilise or activate certain functions available on the HKEX website.

#### Compliance with laws and regulations

HKEX and other members of the Group may be required to retain, process and/or disclose your personal data in order to comply with applicable laws and regulations or in order to comply with a court order, subpoena or other legal process (whether in Hong Kong or elsewhere), or to comply with a request by a government authority, law enforcement agency or similar body (whether situated in Hong Kong or elsewhere) or to perform or discharge the Regulatory Functions. HKEX and other members of the Group may need to disclose your personal data in order to enforce any agreement with you, protect our rights, property or safety, or the rights, property or safety of our employees, or to perform or discharge the Regulatory Functions.

#### Corporate reorganisation

As we continue to develop our business, we may reorganise our group structure, undergo a change of control or business combination. In these circumstances it may be the case that your personal data is transferred to a third party who will continue to operate our business or a similar service under either this Privacy Policy Statement or a different privacy policy statement which will be notified to you. Such a third party may be located, and use of your personal data may be made, outside of Hong Kong in connection with such acquisition or reorganisation.

#### Access and correction of personal data

Under the PDPO, you have the right to ascertain whether we hold your personal data, to obtain a copy of the data, and to correct any data that is inaccurate. You may also request us to inform you of the type of personal data held by us. All data access requests shall be made using the form prescribed by the Privacy Commissioner for Personal Data ("Privacy Commissioner") which may be found on the official website of the Office of the Privacy Commissioner or via this link <a href="https://www.pcpd.org.hk/english/publications/files/Dforme.pdf">https://www.pcpd.org.hk/english/publications/files/Dforme.pdf</a>

Requests for access and correction of personal data or for information regarding policies and practices and kinds of data held by us should be addressed in writing and sent by post to us (see the "Contact Us" section below).

A reasonable fee may be charged to offset our administrative and actual costs incurred in complying with your data access requests.

#### Termination or cancellation

Should your account or relationship with us be cancelled or terminated at any time, we shall cease processing your personal data as soon as reasonably practicable following such cancellation or termination, provided that we may keep copies of your data as is reasonably required for archival purposes, for use in relation to any actual or potential dispute, for the purpose of compliance with applicable laws and regulations and for the purpose of enforcing any agreement we have with you, for protecting our rights, property or safety, or the rights, property or safety of our employees, and for performing or discharging our functions, obligations and responsibilities.

#### General

If there is any inconsistency or conflict between the English and Chinese versions of this Privacy Policy Statement, the English version shall prevail.

#### Contact us

By Post:
Personal Data Privacy Officer
Hong Kong Exchanges and Clearing Limited
8/F., Two Exchange Square
8 Connaught Place
Central
Hong Kong

#### By Email:

DataPrivacy@HKEX.COM.HK