

Operations Division



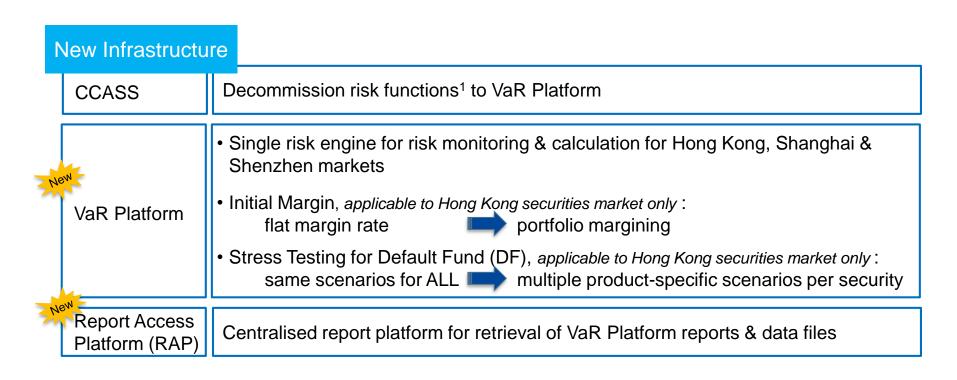
Agenda

- What is VaR Platform
- Latest Update of Familiarisation Programme
- Objectives of the Briefing
- Normal Day Operational
- Contingency Arrangement in case of VaR Failure
- Practice Session
- Appendix



What is VaR Platform?

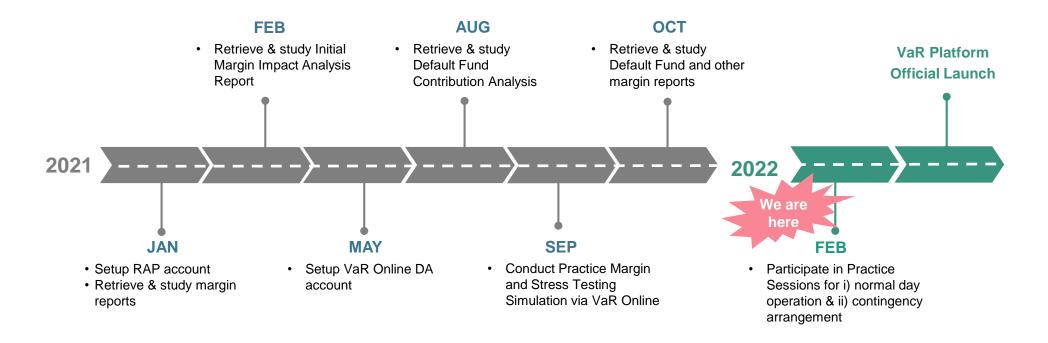
VaR Platform, is a new single risk engine with new risk model, to be applied to HKSCC's Hong Kong market and is mandatory for *all HKSCC Clearing Participants (CPs)*. VaR Platform will take up risk functions from CCASS, with a new infrastructure:





Latest Update of Familiarisation Programme

Since 2021, a sequence of events have been arranged as part of the VaR Platform Familiarisation Programme to facilitate CPs to have a thorough understanding on the new risk model and VaR Platform prior to the official launch, including:





Objectives of the Briefing

- 1. To introduce the daily operational flow and contingency under VaR Failure for participants to prepare for internal operational procedures on risk monitoring, if applicable and fund projection requirement; and
- 2. To walkthrough the details of the Practice Session and simulated schedule for normal day and contingency under VaR Failure to prepare for official launch.



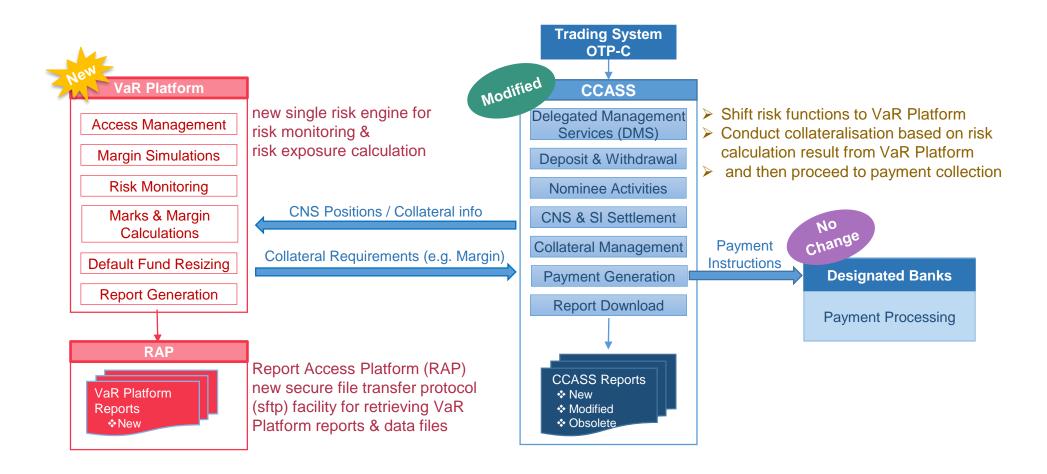
Normal Day Operation

- 1. Marks and Margin of Hong Kong Market
- 2. Stress Test and Default Fund
- 3. Northbound MSTD and MSCD





Relationship between CCASS, VaR Platform and RAP





User Setup to access RAP and VaR Online

Familiarisation Programme is available since January 2021, CPs should have completed steps 1 and 2 below by now.

1. Setup RAP User account & connectivity



- □ Register for RAP User account by submitting a duly signed RAP Registration Form to HKSCC via email, one User account can apply to 2 workstations.
- ☐ Receive the RAP User account from HKSCC for RAP access.
- Ensure SFTP client software be adhered to the SFTP standard, refer details to RAP Technical Guide.
- □ Login RAP and verify the connectivity during its operating hours, from 07:00 to 00:00 every business day.
- Each RAP account contains 3 main folders covering the VaR Platform related supporting documents. CPs should check if the folders are accessible.

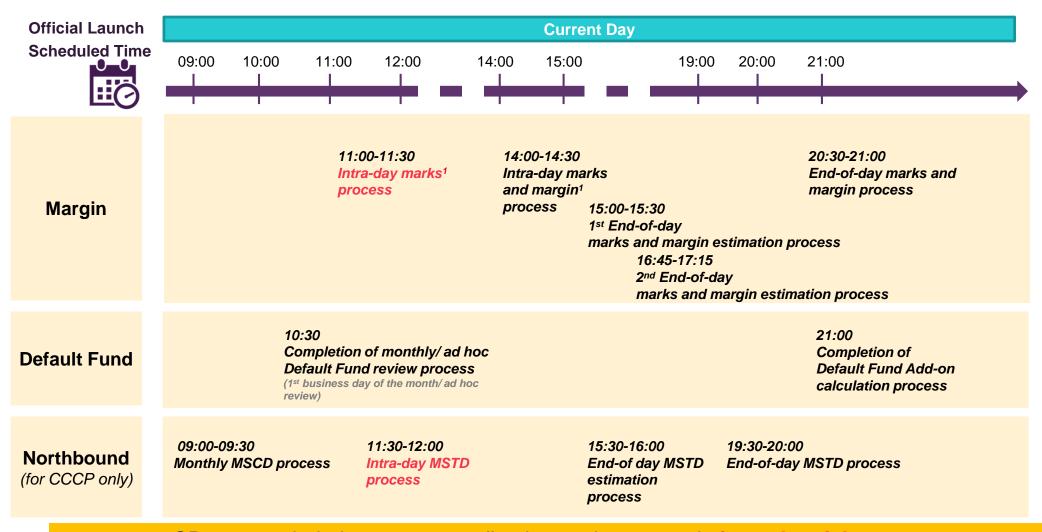
2. Setup Delegated Administrator (DA) account to access VaR Online

- ☐ CPs are required to <u>appoint at least 2 DA users</u> to setup and maintain CPs' designated user for accessing VaR Online.
 - For DA accounts created during the Familiarisation Programme, user access will also be granted by default.



Normal Day Operation

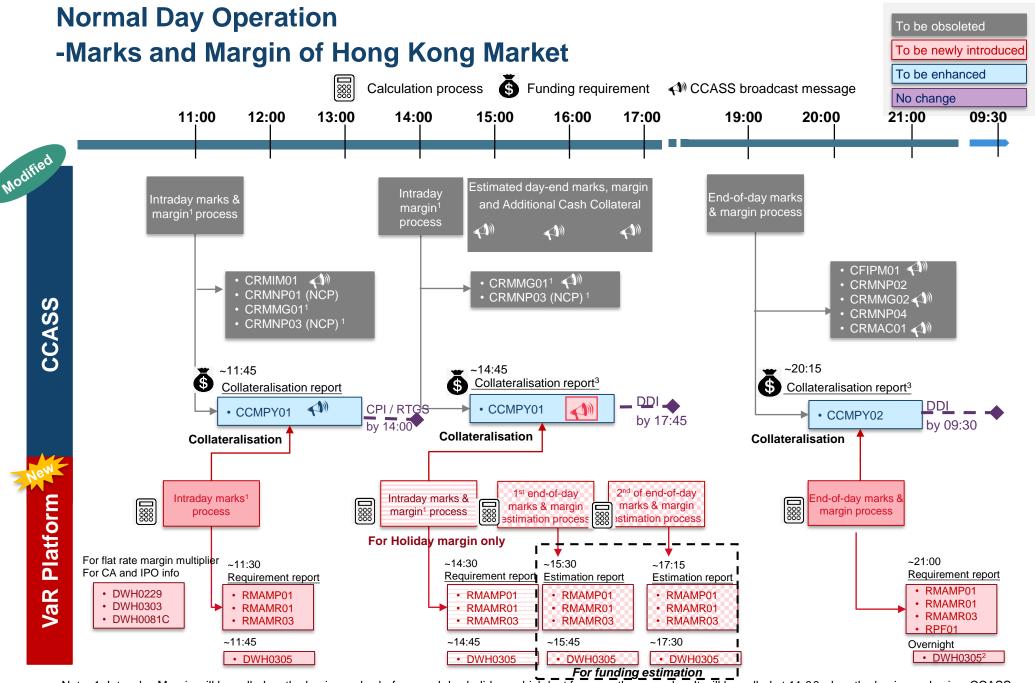
CPs should refer to CCASS reports for their actual risk and payment obligations:



CPs are reminded to set up standing instructions to settle <u>intra-day risk payment</u> by CHATS Payment Instruction (CPI) with eService AC15²

Notes: 1. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS non-settlement day while it will be called at 14:00 when it is a CCASS settlement day.

^{2.} eService AC15 would takes 1 to 2 weeks to be effective. For CPs yet to setup CPI with their designated banks (DB), please do setup CPI with DB first; then submit & complete eService AC 12; before submitting eService AC15. Usually DB needs 3 to 4 weeks to setup CPI



Note: 1. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS non-settlement day while it will be called at 14:00 when it is a CCASS settlement day.

^{2.} End-of-day Series Price Report (DWH0305) will be generated overnight, CPs will be able to retrieve via RAP the next business day, as the operational hour of RAP is from 07:00 - 24:00 on each business day.

^{3.} CPs should refer to collateralisation report for the funding requirement, while refer to Statement of Money Ledger (CSEMA08/CSEMS08) for money movement for marks and margin collected and refunded where applicable.

Marks and Margin of Hong Kong Market

For Normal Day

Intra-day Marks¹ Requirement

Funding Requirement

Payment Deadline

Processing Time	VaR Platform	RAP	CCASS
~11:00 – 11:30	Intra-day marks process for requirement		
~11:30		Reports available: 1.Marginable Position Report (RMAMP01) 2.MTM and Margin Requirement Report (RMAMR01) 3.MTM and Margin Requirement Report (Summary Version) (RMAMR03) 4.Series Price Report (DWH0305) ²	
~11:45			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Posting / Collateralisation Result Report (CCMPY01)
14:00			Payment via CPI / RTGS

Intra-day Marks and Margin¹ Requirement

Funding Requirement

Payment Deadline

Processing Time	VaR Platform	RAP	CCASS
~14:00 – 14:30	Intra-day marks and margin process for requirement		
~14:30		Reports available: 1.Marginable Position Report (RMAMP01) 2.MTM and Margin Requirement Report (RMAMR01) 3.MTM and Margin Requirement Report (Summary Version) (RMAMR03) 4.Series Price Report (DWH0305) ²	
~14:45			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Posting / Collateralisation Result Report (CCMPY01)
17:45			Payment via DDI

- Note: 1. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS non-settlement day while it will be called at 14:00 when it is a CCASS settlement day.
 - 2. Series Price Report (DWH0305) for intra-day will be generated ~15mins after the availability of margin reports.

Marks and Margin of Hong Kong Market (Cont'd)

For Normal Day

End-of-day Marks & Margin Estimation

Processing Time	VaR Platform	RAP	CCASS
~15:00–15:30 (1 st) ~16:45–17:15 (2 nd)	End-of-day marks and margin estimation process for requirement		
~15:30 (1 st) ~17:15 (2 nd)		Reports available: 1.Marginable Position Report (RMAMP01) 2.MTM and Margin Requirement Report (RMAMR01) 3.MTM and Margin Requirement Report (Summary Version) (RMAMR03) 4.Series Price Report (DWH0305) ¹	

End-of-day Marks & Margin Requirement

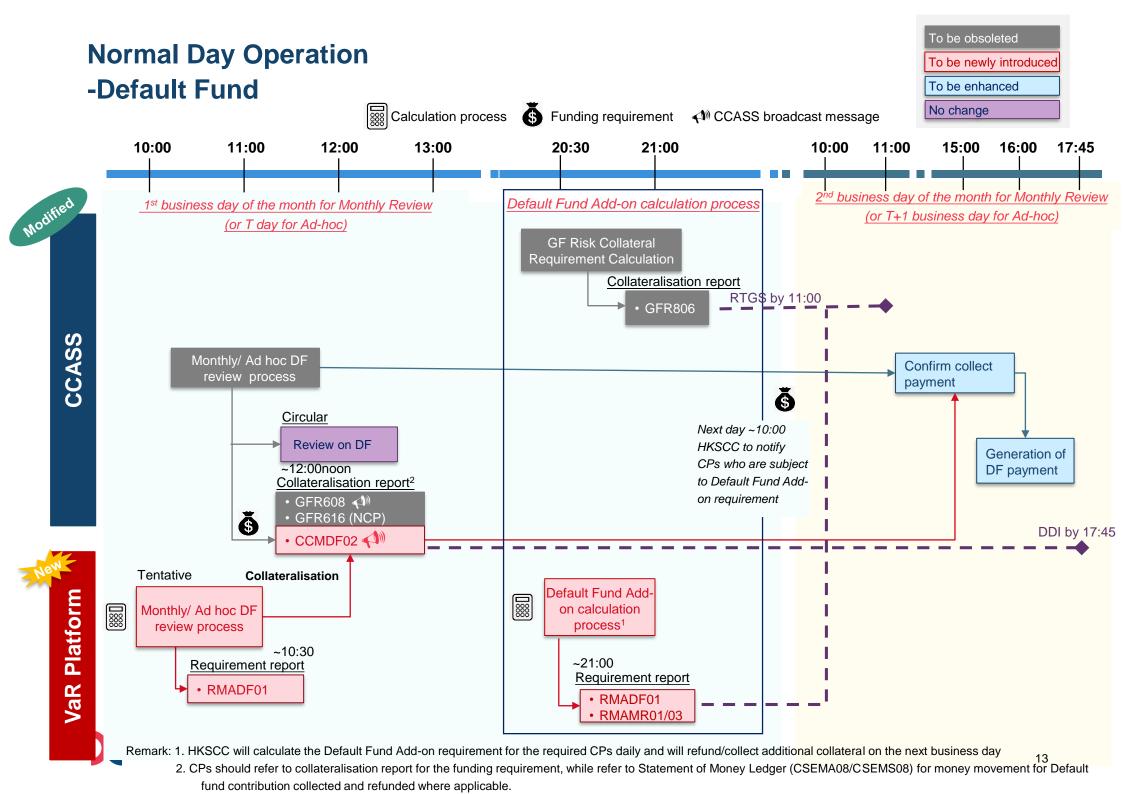
Funding Requirement

Payment Deadline

Processing Time	VaR Platform	RAP	CCASS
~20:30 – 21:00	End-of-day marks and margin process for requirement		
~21:00		Reports available: 1.Marginable Position Report (RMAMP01) 2.MTM and Margin Requirement Report (RMAMR01) 3.MTM and Margin Requirement Report (Summary Version) (RMAMR03) 4.Series Price Report (DWH0305) ¹ 5.Initial Margin Risk Parameter File (RPF01) ²	
~20:15			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Posting / Collateralisation Result Report (Day-End) (CCMPY02)
Next day 09:30			Payment via DDI

Note: 1. Series Price Report (DWH0305) for estimation will be generated ~15mins after the availability of margin reports; while the end-of-day report will be generated overnight and CPs will be able to retrieve via RAP the next business day, as the operational hour of RAP is from 07:00 - 24:00 on each business day.

2. Applicable to CPs who have subscribed for Risk Parameter Files (RPF) folder only.



Default Fund

For Normal Day

	Processing Time	VaR Platform	RAP	CCASS
Monthly/ Ad hoc	~10:00 – 10:30	Monthly/ ad hoc Default		
Default Fund		Fund review for requirement		
Review	~10:30		Reports available: 1.Default Fund Requirement	
Requirement			Report (RMADF01)	
Funding Requirement	~12:00			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Statement of Default Fund Contribution (CCMDF02)
Payment Deadline	Next day 17:45			Payment via DDI

Default Fund Add-
on Requirement

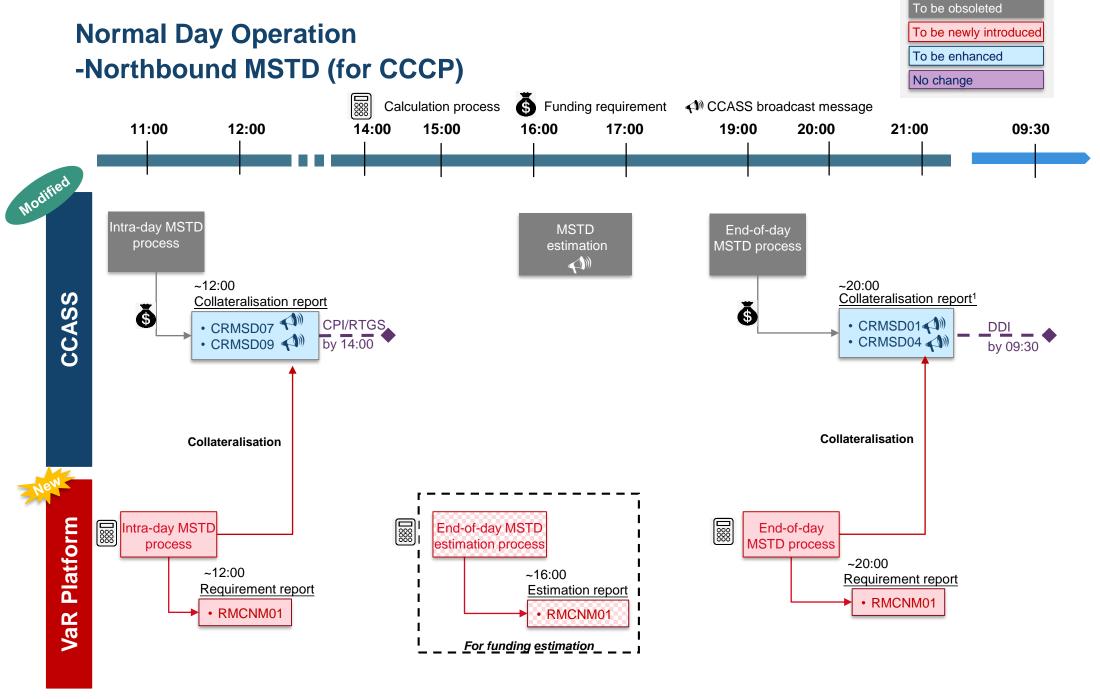
Funding

Requirement

Payment Deadline

Processing Time	VaR Platform	RAP	CCASS
~20:30 – 21:00	Default Fund Add-on for requirement		
~21:00		Reports available: 1.Default Fund Requirement Report (RMADF01) 2.MTM and Margin Requirement Report (RMAMR01) 3.MTM and Margin Requirement Report (Summary Version) (RMAMR03)	
By next day ~10:00			HKSCC to notify CPs who are subject to Default Fund Add-on requirement
Next day 11:00 (for CPs who are subject to Default Fund add-on only)			Payment via RTGS







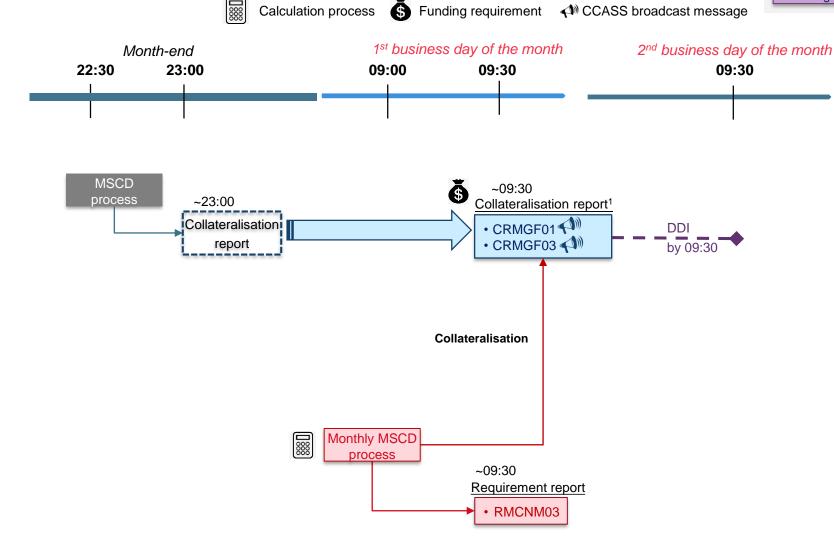
Note: 1. CPs should refer to collateralisation report for the funding requirement, while refer to Statement of Money Ledger (CSEMA08/CSEMS08) for money movement for MSTD collected and refunded where applicable.

Northbound MSTD (for CCCP)

For Normal Day

	Processing Time	VaR Platform	RAP	CCASS
	~11:30 – 12:00	Intra-day MSTD process for requirement		
Intra-day MSTD Requirement	~12:00		Reports available: 1.Risk - Northbound MSTD Requirement Report (RMCNM01)	
Funding Requirement	~12:00			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Intra-day Mainland Settlement Deposit Payable Report (SH/SZ) (CRMSD07/09)
Payment Deadline	14:00			Payment via CPI / RTGS
	Processing Time	VaR Platform	RAP	CCASS
End-of-day MSTD	~15:30 – 16:00	End-of-day MSTD estimation process for requirement		
Estimation	~16:00		Reports available: 1.Risk - Northbound MSTD Requirement Report (RMCNM01)	
	Processing Time	VaR Platform	RAP	CCASS
End-of-Day MSTD	~19:30 – 20:00	End-of-day MSTD process for requirement		
Requirement	~20:00		Reports available: 1.Risk - Northbound MSTD Requirement Report (RMCNM01)	
Funding Requirement	~20:00			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Mainland Settlement Deposit Payable Report (SH/SZ) (CRMSD01/04)
Payment Deadline	Next day 09:30			Payment via DDI







Northbound MSCD (for CCCP)

For Normal Day

	Processing Time	VaR Platform	RAP	CCASS
	~09:00 – 09:30	Monthly MSCD process for requirement		
Monthly MSCD Requirement	~09:30		Reports available: 1.Risk - Northbound MSCD Requirement Report (RMCNM03)	
Funding Requirement	~09:30			Collateralisation based on risk calculation result from VaR Platform to produce: 1.Mainland Security Deposit Payable Report (SH/SZ) (CRMGF01/03)
Payment Deadline	Next day 09:30			Payment via DDI



Operational Difference between CCASS and VaR Platform

CCASS

- Terminal based (with IE 11)
- Access with Smartcard & password
- Broadcast Messages
 - √ report availability
 - Margin requirements



- Download reports / data files via online or Participant Gateway (PG)
- Reports in txt format, data image in fixed length, only available for 3 settlement days

VaR Online

- Browser based (CHROME)
- 2-Factor Authentication:
 - 1. self-defined password
 - 2. One Time Password (OTP)
- ✗ NO Broadcast Messages
 - · reports & margin requirements



RAP

- Adopts Secure Shell (SSH) public-key authentication
- Secure file transfer protocol (SFTP) facility installed at RAP client workstations
- Reports & data files are in csv format available for 10 calendar days



Contingency Arrangement in case of VaR Failure

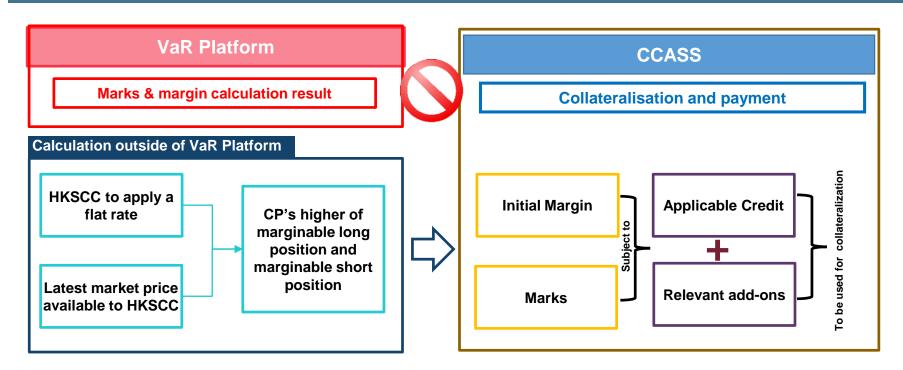




Contingency Arrangement

- in case of Failure of VaR Platform

Alternative Method will be used to calculate Marks and Margin



• CP's initial margin and marks requirement = Max [Flat rate¹ x higher of (CP's marginable long positions², CP's marginable short positions)³ – margin credit⁴ – favourable marks⁵, 0] + unfavourable marks⁶ + position limit add-on⁷ + credit risk add-on⁷ + ad hoc add-on⁷

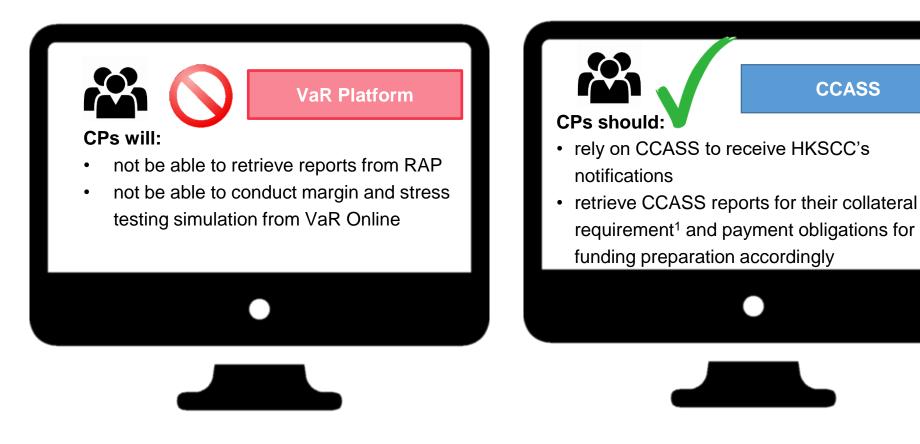
Where:

- 1. Flat rate will be set to 6% and subject to finalization.
- 2. CP's marginable long position refers to the aggregated market value of marginable position CP bought
- 3. CP's marginable short position refers to the aggregated market value of marginable position CP sold (in absolute value)
- 4. Margin credit is assumed to be 5 million Hong Kong Dollar for each CP
- 5. Favourable marks means mark-to-market gain / profit of CP's portfolio
- 6. Unfavourable marks means mark-to-market loss of CP's portfolio
- . Position limit add-on, credit risk add-on, and ad hoc add-on refer to the latest results calculated and shown in the MTM and Margin requirement report before the VaR platform failure



Communication Arrangement

Under the situation of VaR Platform failure:





CCASS

Practice Session – Important Information





Practice Session - Overview

Practice Session - Weekend Activities (Sat & Sun)





Normal daily operation

~ 13:30 - 21:30

2



Contingency Arrangement – VaR Platform failed to operate

~ 09:00 -11:30

Post-Practice Session – Familiarisation Programme (Mon)





Familiarisation Programme

- full day of VaR Platform reports (for ONE day only)



Practice Session

1. CPs should ensure the readiness on technical and operational before commencing the Practice Session, including:

a) Domain Name System (DNS) setup

Ensure the server IP is set as follows:

Preferred DNS: 10.243.1.1 (UDP Port 53); and

Alternate DNS: 10.243.65.1 (UDP Port 53)

In case any CPs not using HKEX provided DNS services to access RAP and VaR Online, please arrange staff with experience to update the host table or change secondary IP addresses before and after the Practice Session. (refer to <u>Practice Session Information Package</u> for more details)

b) Requirement to access to CCASS

Smartcard will be required to login CCASS, CPs should ensure that those participating in such session(s) adopt appropriate measures and, to the extent possible, are able to access the relevant system to conduct the test

2. CPs should also note that during the Practice Session:

a) No Delegated Administrator (DA) support

There will NOT be support on password reset for CCASS DA or account unlock for VaR Online DA, , CPs should ensure successful login to RAP, VaR Online and CCASS.

b) User profiles of CPs

The user profiles of CPs are based on the latest production image prior to the Practice Session, i.e. 25 February 2022 (Fri).



Practice Session







Normal daily operation

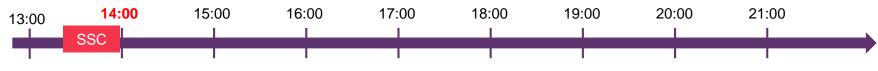
 $\sim 13:30 - 21:30$

Applied start-of-day position data as of 1 December 2021 (Wednesday)

DateTimeStamp	CCASS	RAP
Folder Name / File Name	1 Dec 2021	26 Feb 2022
Business Date in Report	1 Dec 2021	1 Dec 2021
Close time	21:30 on 26 Feb 2022	23:59 on 26 Feb 2022



13:30 – 14:00
Arrange stock collateral to cover short positions to reduce risk obligations (if applicable)



Margin

15:30 Completion of intra-day marks process 17:00 18:00
Completion of 1st Completion of 2nd end-of-day marksend-of-day marks and margin estimation estimation process process

21:00 Completion of end-of-day marks and margin process

Default Fund

13:30
Completion of
monthly/ ad hoc
Default Fund review
process

21:00
Completion of Default
Fund add-on
calculation process

Northbound (for CCCP only)

13:30 Completion of monthly MSCD process

15:45
Completion
of Intra-day
MSTD
process

17:30
Completion of end-of-day
MSTD estimation
process

20:00 Completion of end-of-day MSTD process



Practice Session (Cont'd)





Contingency Scenario

 $\sim 09:00 - 11:30$

Applied start-of-day position data as of 1 December 2021 (Wednesday) and simulate VaR Platform failure at 19:30 system time

DateTimeStamp	CCASS
Folder Name / File Name	1 Dec 2021
Report Date	1 Dec 2021
Close time	11:30 on 27 Feb 2022







VaR Platform fails to operate 09:30

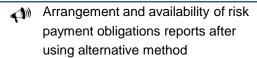
Completion of end-ofday marks and margin process by using alternative method 10:15

VaR Online (After login) "Authentication Failure"

Logout CCASS & Recovery of submit confirmation VaR Platform form 10:30 11:00

CPs should pay attention to the CCASS broadcast message for the status of VaR Platform

CCASS broadcast message





Recovery of the VaR Platform

CPs should refer to CCASS Broadcast Message for contingency arrangement



Practice Session (Cont'd)



Production Verification Session : Connect to Primary Data Centre (Optional)

~ 14:00 - 15:00

For CPs who want to test the connectivity:

1. For RAP and VaR Online:

- Access RAP to verify connectivity → an error message "Connection Refused" will be prompted
- Access VaR Online to verify connectivity via https://rmcd.hkexposttrade.com.hk → an error message "Authentication Failure" will be displayed

2. For CCASS

- Logon to CCASS using the production Smartcard and password via https://www.ccass.com
- Once you logon to CCASS → "Function not available" will be displayed, the connectivity is completed
- Logout from CCASS



Post-Practice Session





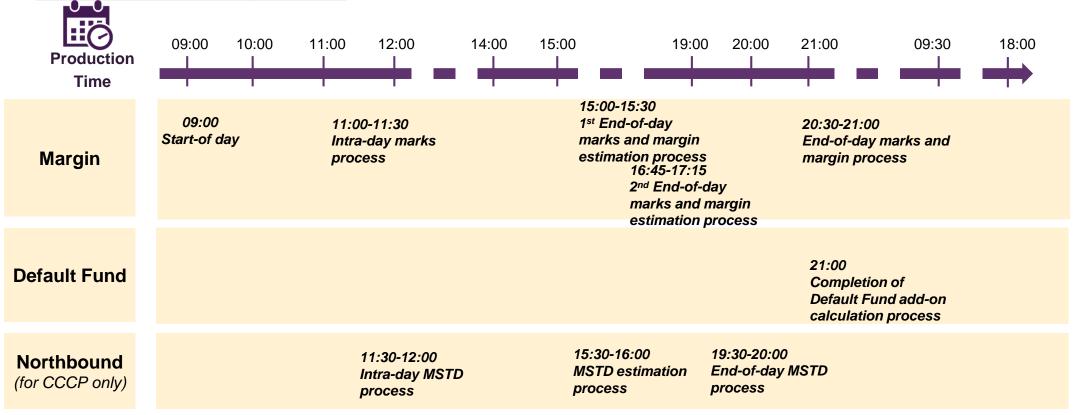
Normal daily operation

Full day

Applied start-of-day position data as of 28 February 2022 (Mon)

To facilitate CPs to verify their daily report retrieval process, a full set of VaR Platform reports, including <u>intra-day reports</u> will be generated and made available via RAP for ONE day on 28 February 2022 (Monday).

VaR Platform Processing Schedule





VaR Platform reports are provided for familiarisation purposes only, CCASS activities performed during the day in production will NOT be reflected

Practice Session – Reminder to CPs





Practice Session (Cont'd) -Reminder to CPs



Before the start of the Practice Session, CPs should:

- Read the VaR Platform Practice Session Information Package
- ensure the participating staffs have access to necessary CCASS functions (e.g. enquiry/ maintenance function)
- change the pre-defined 'Report Directory' for downloading CCASS & VaR Platform reports/ data files
- ensure necessary setup for accessing to RAP, VaR Online and CCASS has been arranged and verified before the Practice Session (e.g. smartcard is required to login CCASS)
- in case any CP not using HKEX provided Domain Name System (DNS) services to access RAP and VaR Online, please ensure the domain for RAP and VaR Online will be resolved to the secondary IP addresses in the host table



no change to IP address for CCASS in host table)



Practice Session (Cont'd) -Reminder to CPs



After the completion of Practice Session, CPs should:

- complete and return this Confirmation Form to the HKEX before 11:30am on 27 February
 2022 (Sunday) by email from the designated participating user.
- remove ALL upload file(s) and downloaded report(s) retrieved during the Practice Session on 26 & 27 February 2022 from production server to avoid misusing them when production CCASS operates on the next business day.
- in case any CP not using HKEX provided Domain Name System (DNS) services to access RAP and VaR Online, please re-connect to Primary Data Centre for RAP and VaR Online to continue familiarisation activates.



Information to CPs





Information to CPs

INFORMATION

The VaR Platform Familiarisation Programme and related materials are available on the HKEX website, please visit the website regularly for the latest information:

- VaR Platform Webcorner
- VaR Platform Practice Session Information Package

The VaR Platform Practice Session can be registered via Event section in Client Connect.

CONTACT

For VaR Platform related enquiries, please contact us via:

Email: NG_PostTrade@hkex.com.hk

VaR Platform Hotline: 2211 6828



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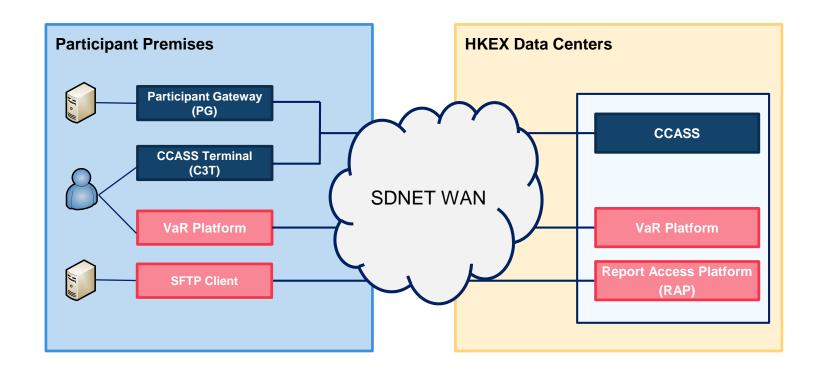
Appendix

- 01 Infrastructure under VaR Platform
- 02 | Key Risk Model Enhancements
- 03 | Initial Margin ("IM") Model
- 04 | Stress Testing for Default Fund ("DF")
- 05 | Normal Business Day Operation Flow
- 06 | VaR Platform Reports





Appendix 01 Infrastructure under VaR Platform



Existing Setup

VaR Platform Setup



Appendix 02 | Key Risk Model Enhancements

Initial Margin ("IM")

Stress testing for Default Fund ("DF")

Current Model

- Single margin rate based on Hang Seng Index ("HSI") applied to <u>all</u> securities
- No risk offset among securities

 Up and down scenarios applied to <u>all</u> securities to generally cover systemic risk

New Model

- 2-tier hybrid model
- Margin requirement based on individual stock volatility
- Allows risk offset among selected securities
- Liquidation cost is considered

 Multiple product-specific scenarios applied to each security

HKSCC adopts methodology-centric enhancements in the new model



Appendix 03 Initial Margin Model

Portfolio margin requirement



	Tier P	Tier N
1 Constituents	 Hang Seng Composite Index ("HSCI") LargeCap and MidCap constituent stocks and related DW / CBBC All equity indices ETFs and related DW / CBBC 	 All non-Tier P instruments (e.g. GEM stocks, SmallCap / MicroCap stocks)
2 Methodology	 VaR-based Portfolio Margining, subject to minimum margin level 	 Flat rate margin, subject to margin multiplier (where appropriate)

A hybrid approach consists of portfolio margining (Tier P) and flat rate (Tier N)





Appendix 03 | Initial Margin Model (Cont'd)

Add-ons

Existing

Corporate Action Add-on⁽¹⁾

- **Liquidation Risk** Add-on
- **Structured Product** Add-on

Current Model

Covered under the single margin rate e.g. 7% and concentration collateral



New Model		
Tier P	Tier N	
Rights / open offer / Distribution in specie	Rights / open offer / Distribution in specie	
Portfolio levelInstrument level	~2% higher of Long / Short	
 Applicable to long positions 	Not applicable	

Position Limit Add-on

Overall CNS exceeds 4 x Liquid Capital



- **Default Fund Add-on**
- CP's Net Projected Loss exceeds 50% DF threshold(2)

Ad-hoc Add-on⁽³⁾

Ad-hoc risk component related to individual CP

Overall CNS exceeds 4 x Liquid Capital



CP's Net Projected Loss exceeds 50% DF threshold



Ad-hoc risk component related to individual CP



- Also known as "Corporate Action Position Margin"
- DF Threshold is the maximum DF size(s) prescribed by the clearing house(s) with reference to the highest DF size in the past 10 years, subject to review from time to time.
- Also known as "Upfront Cash Collateral"



Appendix 04 | Stress Testing for Default Fund ("DF")

DF sizing and allocation



- 1 EUL
- 2 DF size
- Pro-rata % of each CP for DF allocation

Current Model	New Model
 2 hypothetical systemic risk scenarios (proxy of HSI movement) applied to <u>all</u> securities 	 > 200 product-specific scenarios applied to <u>each</u> security
Market up scenarioMarket down scenario	Historical, Hypothetical, Theoretical, Idiosyncratic
■ 1 st + 5 th largest CP exposure	■ 1 st + 5 th largest CP exposure
60-day look-back period	60-day look-back period
CNS position based	 Risk based i.e. stress test value net of its own collateral (EUL)

DF size is determined and allocated based on a more risk based approach in the new model



Appendix 04 | Stress Testing for Default Fund ("DF") (Cont'd)

Operation-related arrangements

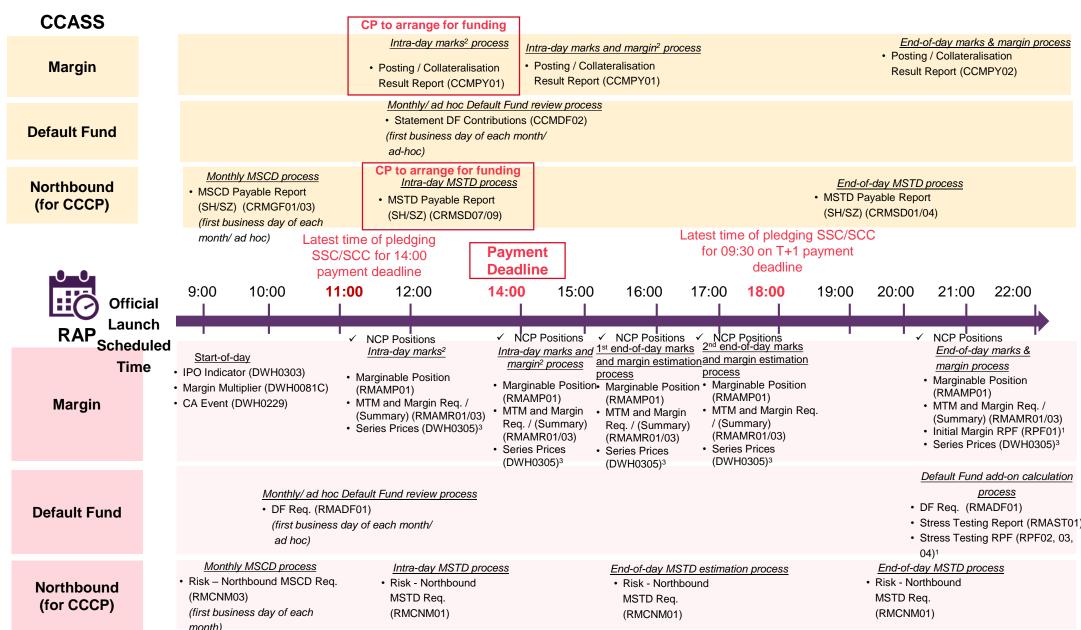
	Current Model	New Model
1 Review frequency	Monthly at start-of-monthAd-hoc	 Monthly at start-of-month Ad-hoc
2 Collection	1 business day after review	■ 1 business day after review
3 DF credit	■ HK\$1 million	■ HK\$1 million
Periodic DF projection / report ⁽¹⁾	 ~12:00 noon during monthly DF review and ad-hoc DF review 	 ~10:30 am during monthly DF review and ad-hoc DF review Flexibility to simulate Stress Test Value ("STV") intra-day
5 DF report information	 Available for DCP and GCP (with NCP projection) 	 Available for DCP and GCP (with NCP projection)

Most existing operational arrangements remain unchanged in the new model



Appendix 05 | Normal Day with Holiday Operational Arrangement

Below is the detail schedule of full day repots throughout the day in logical time:



Note: 1. Applicable to CPs who have subscribed for Risk Parameter Files (RPF) folder only

- 2. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS non-settlement day while it will be called at 14:00 when it is a CCASS settlement day.
- 3 Series Price Report (DWH0305) for intra-day and estimation will be generated ~15mins after the availability of margin reports, while for end-of day will be generated overnight, CPs will be able to retrieve via RAP the next business day, as the operational hour of RAP is from 07:00 24:00 on each business day.

Appendix 06 | VaR Platform Reports

VaR Platform reports are available to retrieve via RAP, including:

Margin Reports:

RAP Folder	Report	Time Available upon Official Launch	Description
Inbox	Marginable Position Report (RMAMP01)	Each business day	Marginable positions incorporated in the corresponding margin calculation, and supplementary information at position level
Inbox	MTM and Margin Requirement Report (RMAMR01)	1. ~11:30 (Intraday marks¹ process) 2. ~14:30 (Intraday marks & margin¹ process) 3. ~15:30 (1st end-of-day marks and margin estimation process) 4. ~17:15 (2nd end-of-day marks and margin estimation process)	MTM and margin requirement together with the margin component details
Inbox	MTM and Margin Requirement Report (Summary Version) (RMAMR03)	marks and margin estimation process) 5. ~21:00 (End-of-day marks and margin process)	A summary version of RMAMR01



Corresponding reports in CCASS

- Intra-day Marks and Collateral Collection Report (CRMIM01)
- Margin Payable Report (CRMMG02)
- Intra-day Margin Payable Report (CRMMG01)
- Guarantee Fund Risk Collateral Requirement Report (GFR806)
- Additional Cash Collateral Payable Report (CRMAC01)
- NCP Marks Projection Report (intra-day) (CRMNP01) (for GCP only)
- NCP Marks Projection Report (day-end) (CRMNP02) (for GCP only)
- NCP Margin Projection Report (intra-day) (CRMNP03) (for GCP only)
- NCP Margin Projection Report (day-end) (CRMNP04) (for GCP only)

[To be modified]

- Posting / Collateralisation result Report (intra-day) (CCMPY01)
- Posting / Collateralisation result Report (day-end) (CCMPY02)

Note: 1. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS nonsettlement day while it will be called at 14:00 when it is a CCASS settlement day.



Appendix 06 | VaR Platform Reports (Cont'd)

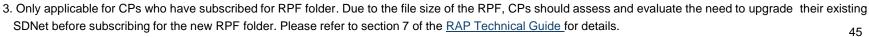
Additional VaR Platform reports are available to retrieve via RAP, including:

New Reports (additional information for margin requirement):

RAP Folder	Report	Time Available upon Official Launch	Description
Common	Corporate Action Event Report (DWH0229)	Each business day ~10:00	Corporate action events of Hong Kong market that may lead to marginable position adjustment
Common	Series Price Report (DWH0305)	Each business day 1. ~11:45 (Intraday mark¹ process) 2. ~14:45 (Intraday marks & margin¹ process) 3. ~15:45 (1st end-of-day marks and margin estimation process) 4. ~17:30 (2nd end-of-day marks and margin estimation process) 5. Overnight² (End-of-day marks and margin process)	Instrument prices and exchange rates for Hong Kong market's margin calculation
Common	IPO Indicator (DWH0303)	Each business day ~09:00	IPO stocks that are newly listed that will impact the margin calculation
Inbox	Daily Participant Margin Multiplier Report (DWH0081C)	Each business day ~09:00	Current and to-be effective multiplier
RPF ³	Initial Margin Risk Parameter File (RPF01)	Each business day ~21:00	Contains key risk parameters required for calculation of MTM and margin requirement for Hong Kong market

Noted: 1. Intra-day Margin will be called on the business day before weekday holidays which last for more than one day. It will be called at 11:00 when the business day is a CCASS non-settlement day while it will be called at 14:00 when it is a CCASS settlement day.

^{2.} End-of-day Series Price Report (DWH0305) will be generated overnight, CPs will be able to retrieve via RAP the next business day, as the operational hour of RAP is from 07:00 - 24:00 on each business day.

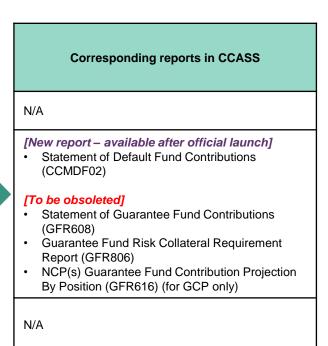




Appendix 06 | VaR Platform Reports (Cont'd)

Default Fund Reports:

RAP Folder	Report	Time Available upon Official Launch	Description
Inbox	Report (RMAST01) On the first business day of each month ~10:30 (Monthly DF review/		STV calculated based on the returns of stress scenarios defined by HKEX for Hong Kong market
Inbox			Monthly or ad hoc default fund requirement
RPF ¹	Stress Testing Risk Parameter Files (RPF02, RPF03, RPF04)	Each business day ~21:00	Contains key risk parameters for calculation of STV for Hong Kong market



Appendix 06 | VaR Platform Reports (Cont'd)

Northbound Reports: (Only applicable to the China Connect Clearing Participants (CCCP))

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RAP Folder	Report	Time Available upon Official Launch	Description
Inbox	Risk – Northbound MSTD Requirement Report (RMCNM01)	Each business day 1. ~12:00 (Intra-day MSTD process) 2. ~16:00 (End-of-day MSTD estimation process) 3. ~20:00 (End-of-day MSTD process)	MSTD requirement of CCCP for Northbound China Connect markets
Inbox	Risk – Northbound MSCD Requirement Report (RMCNM03)	~09:30 on the first business day of each month	MSCD requirement of CCCP for Northbound China Connect markets

Corresponding reports in CCASS

[To be modified]

- Mainland Settlement Deposit Payable Report (Shanghai) (CRMSD01)
- Mainland Settlement Deposit Payable Report (Shenzhen) (CRMSD04)
- Intra-day Mainland Settlement Deposit Payable Report (Shanghai) (CRMSD07)
- Intra-day Mainland Settlement Deposit Payable Report (Shenzhen) (CRMSD09)

[To be modified]

- Mainland Security Deposit Payable Report (Shanghai) (CRMGF01)
- Mainland Security Deposit Payable Report (Shenzhen) (CRMGF03)

CPs can make reference to the Comparison Guidelines, Calculation Guides and Report Specifications available in <u>HKEX website</u> for more details.

