HKATS & DCASS UPGRADE: Frequently Asked Questions (FAQ) (as of April 2019)

This FAQ will be updated from time to time and is subject to change.

Part 1 Infrastructural Changes

HKATS & DCASS online access

1. How to access HKATS & DCASS via online after the Upgrade?

Participants can online access HKATS & DCASS via a new browser frontend with the existing SDNet via Central Gateway connection.

HKATS Online will be available to Exchange Participants (EP) as a contingency access to HKATS and to perform block trade facilities.

DCASS Online will be available to Clearing Participants (CP), as a replacement to the existing DCASS Servers and DCASS Terminals.

2. What are the technical requirements for HKATS & DCASS online access?

The technical requirements for HKATS & DCASS online access are as below:

Minimum Requirement		
Processor	Intel Core i3-550 3.2GHz or higher	
RAM	4GB	
Storage	3GB	
Network adapter	100Mbps full-duplex	
Monitor	21" with 1280 x 1024 resolution	
Operating System	Microsoft Windows 7 (64 bit)	
Layered software	Anti-virus software	
Supported Browser	Google Chrome ¹	
Network Circuit	- via SDNet connection	
	- Firewall/Services Ports configuration, if necessary	

Note (i):

Participants are required to complete firewall configuration for HKATS & DCASS online before market rehearsal activities. For details, please refer to the <u>Information Paper</u> available via the <u>HKATS & DCASS Upgrade web corner</u>

¹ Google Chrome will be the supported Browser for PTRM as well.

Note (ii):

Although there are later Chrome browser versions in the market, the Google Chrome browser version 68.0.3440.106 is the version which HKEX has performed testing on and supports the functions of HKATS/DCASS Online. Hence, Participants should install Google Chrome browser version 68.0.3440.106 at their PCs for HKATS/DCASS Online. Any HKATS/DCASS Online related issue is based on version 68.0.3440.106 for trouble shooting during and after the rollout of HKATS & DCASS Upgrade.

Besides, it's a common practice for Google to maintain the backward compatibility for every release update. In the unlikely event that a backward incompatibility issue happens, Participants are required to re-instate to the Chrome version as specified by HKEX.

3. Would Participants need to apply for new set of User IDs for HKATS & DCASS Online?

Participants will use the existing CLICK and DCASS Terminal user IDs and passwords for HKATS & DCASS online access.

4. Will all existing CLICK related functions be available via HKATS online?

EP are advised to modify/develop OAPI programs to manage their trading activities, as needed. HKATS Online only serves as a contingency access to HKATS and to perform block trade facilities.

5. What kind of market data information will be available in HKATS online?

Price information shall be available via HKATS online for contingency purpose.

6. Are there any changes in the Pre Trade Risk Management system?

There are no changes in the PTRM system. All settings including the risk limits and pre-trade limit group shall be migrated during the Upgrade.

7. When should Participants terminate their CLICK, DCASS Servers/Terminals?

Participants should only terminate their CLICK (if applicable), DCASS Servers/Terminals upon the completion of the two-week stabilization period after the launch of Upgrade.

8. What is the connection fee for HKATS & DCASS?

The indicative connection fee for HKATS & DCASS will follow the existing HKEX's Central Gateway connection fee at HK\$2,600 per connection per month.

Sub-license fee for DCASS OAPI via the central gateway

2,600/month/connection

Connection fee for DCASS online access via the central gateway (1 connection consists of 2 DCASS Online Users and 1 DCASS Administration User)

2,600/month/connection

Please see the below fee table as reference:

No. of DCASS Online Users	No. of DCASS Administration Users	Monthly connection fee
2	1	HK\$ 2,600
> 2 and ≤ 4	1 or 2	HK\$ 5,200
5 or 6	1 or 2	HK\$ 7,800
≥ 2 and ≤ 6	3	HK\$ 7,800

Central Gateway (CG) and the decommissioning of Network Gateway (NG)

9. Can Participants continue to use NG after the Upgrade?

NG will no longer be supported upon the Upgrade. For Participants still using NG, they should start planning for migration of NG connection to CG as soon as practicable. New Participants are advised to subscribe for CG connection, since NG will be decommissioned upon the launch of the Upgrade.

HKEX offered a promotion program from now to the tentative launch date. Only active NG connections in December 2017 will be eligible to the promotion program. The successful migrated CG connections will be charged at a concession rate of HK\$1,750 per connection per month upon the FULL decommissioning of Participants' NG connections for OAPI within the promotion program. Upon the launch of Upgrade, the charges for all CG connections will be resumed to the existing standard rate, i.e. HK\$2,600 according to the respective Exchange and Clearing Houses Rules and Procedures². For details of the promotion program, please refer to the relevant Trading and Clearing circulars.

10. Given CG does not support CLICK and retrieval of market data via OAPI, what is the migration plan for CLICK and market data?

Please refer to Question 1 on HKATS online access and Part 5 on market data.

11. Should recertification be required on those existing OAPI programs? Yes, both HKATS & DCASS OAPI programs should be modified to incorporate the OAPI

HKFE: http://www.hkex.com.hk/eng/rulesreg/traderules/hkfe/documents/fe-app-b.pdf
HKCC: http://www.hkex.com.hk/eng/rulesreg/clearrules/hkfe/documents/fe-app-b.pdf
SEOCH: http://www.hkex.com.hk/eng/rulesreg/clearrules/hkfe/documents/fe-app-b.pdf
SEOCH: http://www.hkex.com.hk/eng/rulesreg/clearrules/hkfe/documents/fe-app-b.pdf

changes. Hence, ALL OAPI programs should be re-certified, and successfully verified during Market Rehearsal before the Upgrade. Please refer to the OAPI technical specification, re-certification arrangement and the re-certification timeline on the hkats/https://example.com/hkats/https://exa

12. Can Participants terminate their NG access now?

Participants are advised to complete the migration of OAPI programs from NG to CG connections before the Market Rehearsal. Since CLICK connection only available via NG connection, EP who are retaining their CLICK connections until the launch of the Upgrade are still required to maintain their CLICK related NG until the completion of the two-week stabilization period after the launch of Upgrade.

13. What is the SDNet bandwidth requirement of Upgrade?

The minimum requirements for the SDNet bandwidth are listed in the table below:

Per Connection	Bandwidth Requirement	
rer Connection	HKATS only	DCASS only
OAPI connection	3 Mbps ³	3 Mbps
Online connection	0.4 Mbps	0.4 Mbps
Report retrieval connection	N/A	1 Mbps
PTRM Gateway	1 Mbps	

Please refer to the Information Paper available via the HKATS & DCASS Upgrade web corner.

14. Is OAPI certification requires to complete before market rehearsal?

Yes, all OAPI program are required to complete certification before the market rehearsal. Participants should allow sufficient time to test the newly updated version of OAPI and BOS programs before market rehearsal.

Report Retrieval Solution

15. Why there is a new Report Retrieval Solution? (New)

With the decommissioning of DCASS Servers and DCASS Terminals, DCASS and PTRM reports will no longer be downloaded to Participants' DCASS Servers; instead Participants should retrieve reports from Report Retrieval Solution. Report Retrieval Solution will be implemented in Nov 2018 and available in parallel with existing DCASS Servers for report

 $^{^{3}}$ 3 Mbps is optimal for support up to 250 TPS with 2 copies of firm based broadcast (BO5).

retrieval until the launch of the Upgrade.

16. What is the technical requirement for Report Retrieval Solution? (New)

Participants are required to study the Technical Guide and get prepare for the parallel run; Participants are required to ensure SFTP client software is be adhered to the SFTP standard and generate a pair of SSH keys to HKEX for registration.

17. Any different that reports download from Report Retrieval Solution from DCASS Terminals? (New)

Each Participant can access to a common and a designated folder which contains DCASS and PTRM reports. Reports & files will be compressed in zipped format. The file name of common reports/files Reports available to all Clearing Participants will be standardized by removing the DCASS Customer Code "Cxxx", please refer the Information Paper for list of reports/files with new file name. Please note, the report format and content will remain unchanged during the parallel run period.

18. How many users will be assigned to access Report Retrieval Solution? (New)

Participants will receive two user accounts to access the Report Retrieval Solution for their corporate use.

19. Will the report format and content change upon the Upgrade? (New)

The report format and content, e.g. new fields, length of fields, etc. will be updated in order to support new initiatives upon the launch of the Upgrade, please refer the report specifications in HKATS & DCASS Upgrade web corner for detail.

Part 2 Functional Changes

Increase the length of HKATS Root Symbol

20. Will the length of the existing HKATS root symbols be increased from 3 to 5 alpha-numeric characters as well?

All existing HKATS root symbols will remain unchanged. After the Upgrade, the length of HKATS root symbols for new underlying will be vary from 3 to 5 characters.

Increase the field length of the "exchange info" field at order level

21. What is the extended "exchange info" field for?

The additional bytes extended in the "exchange info" field are reserved for HKEX's future

use. Participants should only use the leftmost 15 bytes of the data field.

Allow SEOCH Participants to set their own exercise limit for Stock Options (OCH) Contracts

22. Can SEOCH Participants set their own exercise limit after the Upgrade?

Currently the exercise limit is preset as 1.5% of the strike by the Clearing House. After the Upgrade, SEOCH Participants can set their own exercise limit, in term of % or fixed value, per Instrument Type via DCASS online access. SEOCH Participants should be reminded to set the exercise limit with caution; the preset limit will be applicable to <u>ALL</u> series within the same instrument type, with immediate effect.

23. What is the cut-off for exercise parameters to be set on and before expiry?

With the new exercise limit create function (Setting CPs' own limit in Automatic Exercise for stock options); CPs shall input such exercise limit, or other parameters prior to the close of trading on any Business Day, such input will be reflected after the day-end batch.

24. Are there any changes to form submissions to Exchange or Clearing House? E.g. Position transfer/ netting?

There is no change on current form(s) submission.

Margin Simulation function

25. What is the impact on the Margin Simulation function?

Margin Simulation function will be temporary disabled after the Upgrade, until further notice. CP can make use of the Risk Parameter File (RPF) to simulate the margin with SPAN.

Part 2a HKATS & DCASS Online and PTRM

26. What browser should I use to login HKATS & DCASS Online?

Participants should use Google Chrome to login HKATS & DCASS Online which is the same browser to operate PTRM.

27. Any change on user ID and password to login HKATS & DCASS Online compare with CLICKS & DCASS terminal?

Participants please use existing user ID and password of CLICKS & DCASS terminal to login HKATS & DCASS Online.

28. Any recommendation on password and how often should change password?

Participants are advice to have their password setting with at least 8 characters contain a combination of letters (both upper & lower case) and numbers and change password every 90 days.

29. How many users will be available for HKATS & DCASS Online?

One user per CG for HKATS Online and two users per CG for DCASS Online will be assigned to Participants.

30. Any change on throttle rate assigned for DCASS OAPI user after the Upgrade?

The current throttle rate for DCASS OAPI users remains unchanged after the Upgrade. Subject to the Clearing House approval, CP with substantial post-trade activities can consider subscribing for multiple DCASS connections to achieve a higher throttle rate. Details will be available in due course.

31. Is there any number of row limitations on different views of HKATS & DCASS Online?

There is limitation on number of rows depending on each views of HKATS & DCASS Online; Participants who have high volume of usage on particular function should develop their own OAPI program.

Part 3 New Initiatives

Facilitate trading & clearing of HKFE contracts with multiple expiry dates (e.g. weekly expiry)

32. How to distinguish HKFE contracts with monthly expiry dates vs weekly expiry dates?

Participants can distinguish monthly and weekly expiry contracts, by referencing to:

- i) <u>Market Code</u> HKFE contracts with weekly expiry dates will be under a different market code; while carry the same HKATS root symbols as those for monthly expiry contracts
- ii) <u>Series Name</u> series name will be extended to include weekly and expiration date indicator

Contract Type	Series Name	Remarks
Monthly (per existing)	HSI20000L7 HSI20000X7	
Weekly (new)	HSI20000L7 W15 HSI20000X7 W15	W indicates contract with weekly expiry date15 Indicates the expiration date

iii) Risk Parameter File (RPF) day code is added to various records in RPF if the product has multiple expiry contracts. Please refer the information paper and relevant technical documentation available via the HKATS & DCASS Upgrade web corner for details. Refer to part 4 of this FAQ for more information on RPF.

33. How should Large Open Position reporting be prepared for HKFE weekly expiry contracts?

Different types of contract will be differentiated as follows:

Monthly contract (existing): "YYYYMM" – remain unchanged

Weekly contract (new): "YYYYMMWDD" – extended with expiry week and date

Enhanced Large Open Positions Report Templates, for both futures market and stock options market can be found at the <u>HKATS & DCASS Upgrade web corner</u> under "Report Specifications (with samples)".

Facilitate HKFE contracts to be traded and cleared during Hong Kong holidays

34. Will HKATS & DCASS support trading and clearing during weekends after the Upgrade?

No, after the Upgrade, HKATS & DCASS will support trading and clearing of HKFE contracts during Mondays to Fridays only, including Hong Kong holidays.

35. Which contracts will be eligible for holiday trading and clearing?

Subject to product development, eligible contracts will be announced in due course. To enable Participants to verify their capability to support trading and clearing during Hong Kong holidays, during Market Rehearsal, sample holiday trading contracts will be set up to simulate trading and clearing during Hong Kong holidays.

36. How do we get the next clearing date for holiday products?

Same as today, Participants can retrieve the current clearing date and next clearing date for both holiday and non-holiday products via CQ68.

37. Understand that CCMS report, CCMPY01/02, will be modified to cater for holiday trading after the Upgrade. Will there be any modification to other CCMS or DCASS reports?

CCMPY01/02 is the only CCMS report modified with new sections to cater for the holiday trading initiative, which is only applicable to Participants participating in holiday trading. While various DCASS reports, will be modified to cater for the enhanced system features and new business initiatives. Participants should refer to Appendix D of the Information Paper for details.

Part 4 Risk Parameter File (RPF)

38. Can contracts with monthly expiry date and flexible expiry date be differentiated in Risk Parameter File?

Risk Parameter File is a file detailing the risk parameters used in a margin calculation. It is solely for margin calculation purpose and is not aimed at providing detail contract specification nor contract attributes.

In a RPF, all contracts available for inter-month spread are located in the same combined commodity. Therefore according to the existing margin offset offer in HKCC, all HSI contracts (incl. the standard monthly contracts, mini contracts, flexible contracts and any potential flexible expiry contracts) are in the same combined commodity using the same presentation method on Contract Day Code. CPs will as a result find the following presentation:

Combined Commodity	Contract Day Code in RPF
with Flexible Expiry Date Contract(s)	Day Code will be applied to all contracts in this combined commodity. The Day Code will be filled in with the expiration date of the contract per contract specification
without Flexible Expiry Date Contract(s)	Existing format, i.e. Day Code will be left blank in RPF

To differentiate monthly expiry date and flexible expiry date, please relay to trading calendar at HKEX web page

(http://www.hkex.com.hk/Services/Trading/Derivatives/Overview/Trading-Calen dar-and-Holiday-Schedule?sc lang=en) to retrieve the information of expiration date. For the contracts with flexible expiration date, they shall not fall onto same expiration date of monthly contracts.

Example of new trading calendar for weekly contracts:

Contract Week	Last Trading Day/Expiry Day	Final Settlement Day
1	4-Jan-19	7-Jan-19
2	11-Jan-19	14-Jan-19
3	18-Jan-19	21-Jan-19
4	25-Jan-19	28-Jan-19

39. What will be the format of day code in Risk Parameter File?

It is a 2-digit field to be filled in with a value ranging from 01 to 31, indicating the expiration date of the contract. For example, Day Code 12 indicates that the contract expires on the 12th day of the contract month. For more details on all record types with a Day Code,

please refer to the CME's SPAN⁴ Risk Parameter File specification.

40. Will Risk Parameter File be provided for holiday trading?

Yes, RPF will be available according to the existing daily schedule during holiday trading days.

41. For holiday trading, will the Risk Parameter File only consist of non-holiday products?

No, both holiday trading and non-holiday trading products will be included in the Risk Parameter File.

42. Can a Combined Commodity apply both Delta Based and Scanning Based Intercommodity Spread (ICS)?

HKCC will offer either one of them for each Combined Commodity Group.

43. Is there any example to demonstrate the methodology of Scanning Based Intercommodity Spread?

Updated PRiME Margining Guide and the examples on Scanning Based Intercommodity Spread and Flexible Expiry Date Contract are already uploaded and are available via HKEX website.

44. Will Scanning Based Intercommodity Spread be covered in Market Rehearsal? Scanning-based Intercommodity Spread will not be covered in Market Rehearsal for HKATS and DCASS Upgrade. To ensure there is enough preparation time for the market, more information in particular an updated PRiME margining guide will be provided in advance when there is plan to implement this margin calculation method in the future.

45. Do the exchange rate pairs in record type T of Risk Parameter File have reciprocal relationship? What is the application of the newly introduced reverse exchange rate?

For any pair of currencies, for example HKD and USD, both the HKD to USD exchange rate and the reversing USD to HKD exchange rate will be provided in record type T of the Risk Parameter File and they may not be reciprocal of each other. The introduction of reverse exchange rate would be applicable for Scanning Based Intercommodity Spread calculation in which the exact direction of exchange rate conversion shall be used.

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Part 5 Market Data

46. We are now using NG to access CLICK, OMD data as well as DCASS. With the decommissioning of NG after the Upgrade, when should we migrate our NG connection to CG?

After the Upgrade, Participants can ONLY access HKATS and DCASS via CG connection. To simulate the upgraded infrastructure after the Upgrade, only CG connections will be supported for access to HKATS and DCASS during the Market Rehearsal (MR). To avoid changing of network configurations back and forth between NG and CG during the MR period, Participants should migrate their existing NG connections, if applicable, to CG well before the MR. Participants are reminded to plan ahead and enroll for the promotion program to enjoy CG connection with a concession rate of HK\$1,750 (vs the standard CG connection at HK\$2,600) per existing NG connection early migrated to CG; from upon early migration till the launch of the Upgrade. For details of the promotion program, please contact HKATS and DCASS hotline for details.

47. Can we use the new feed - "D Lite" for algo trading?

Yes. The new feed could be used for both display and non-display purposes.

48. Is "Non-display" usage included in D-Lite for EP?

Yes, at no additional cost.

49. If I'm a potential EP, can I enjoy the D-Lite for EP?

Yes, subject to the application process.

50. How can EP ensure they can enjoy the 20 terminal waivers if they are already using L2 services?

The 20 free terminals displaying L2 market data for EP's internal use applies to all EPs upon the full migration of the EP's NG connections to CG, regardless if the EP subscribes for D-Lite. EP who subscribes for OMD DS/DP/DF directly with HKEX could claim the waiver. EP could also apply the waiver for their IV service subscription.

51. How to effect 20 free terminals in monthly subscription report and when to implement?

HKEX Information Services Limited will provide a standard form for EP to report the free units and more information is available via the <u>Market Data web page</u>.

52. Do we need to sign a vendor agreement, if D-Lite is for internal use only?

D-Lite is restricted for external distribution to EP's trading clients and/ or internal use only. For external distribution, Vendor licence agreement is required. For internal use only, End-User licence agreement is required.

53. Is the D-Lite Order Feed available for the existing OMD-D (i.e. DS/DP/DF) clients to subscribe?

No, the D-Lite Order Feed is a complimentary datafeed to D-Lite and only D-Lite clients are eligible to subscribe.

54. Can we move the subscribed OMDD datafeed product(s) (i.e. DS/DP/DF) to the D-Lite planned for EP?

It is the EP's choice for the market data solution that meets its business needs. Clients are recommended to review their own business needs against the service provided in each datafeed product before they make the decision.

55. If EP subscribes D-Lite and disseminates the data to their end-user clients, say 100 clients, will it incur any end-user licence fee?

For D-Lite, the HKD2,000 flat fee includes Redistribution Fee, Connection Fee and Subscriber Fee. EPs are not required to pay per user.

56. Do we need to pay for the One-off Connection Fee for D-Lite and DS?

One-off Connection Fee and market data test fees for D-Lite and DS are waived for EPs (vendor/ end-user licensee applicant) during the onboarding period before D-Lite is launched.

57. Can we subscribe D-Lite and other existing OMD-D datafeed product(s) (i.e. DS / DP / DF) on the same set of connections?

Yes, clients may consider to subscribe all OMD-D datafeed products on the same set of connections given that the set of connections meets the minimum requirements for receiving data from all subscribed datafeeds.

58. Is there any difference in terms of message content provided via the Derivatives Trade (DT) feed under DS and D-Lite?

No, the Derivatives Trade (DT) feed under DS and D-Lite is actually the same feed and therefore there is no difference in message content and other areas.