



NEXT GENERATION POST TRADE PROGRAMME UPDATE



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Head of Platform Development

Next Generation Post-Trade Platform

26 Nov 2018

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Managing Director

Head of Clearing Risk Management

04 Dec 2018

AGENDA

- 1 NextGen Post Trade Platform
- 2 Client Connect
- 3 Single Risk Engine
- 4 Data Warehouse and Business Intelligence
- 5 System Requirements
- 6 Timeline
- 7 DLT Platform – Stock Connect
- 8 Client Engagement

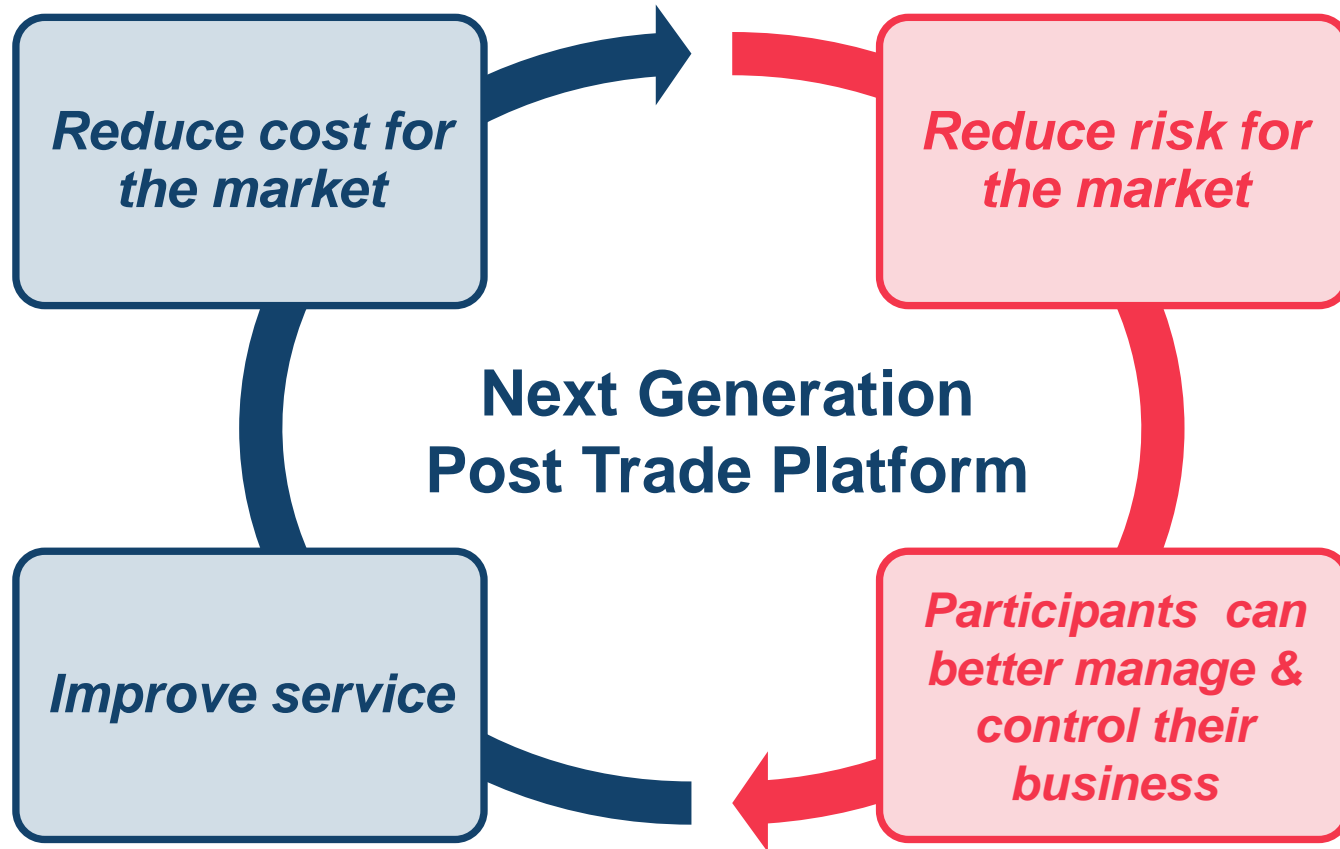




NEXTGEN POST TRADE PLATFORM

NEXTGEN KEY DRIVERS

Our drivers are simple:

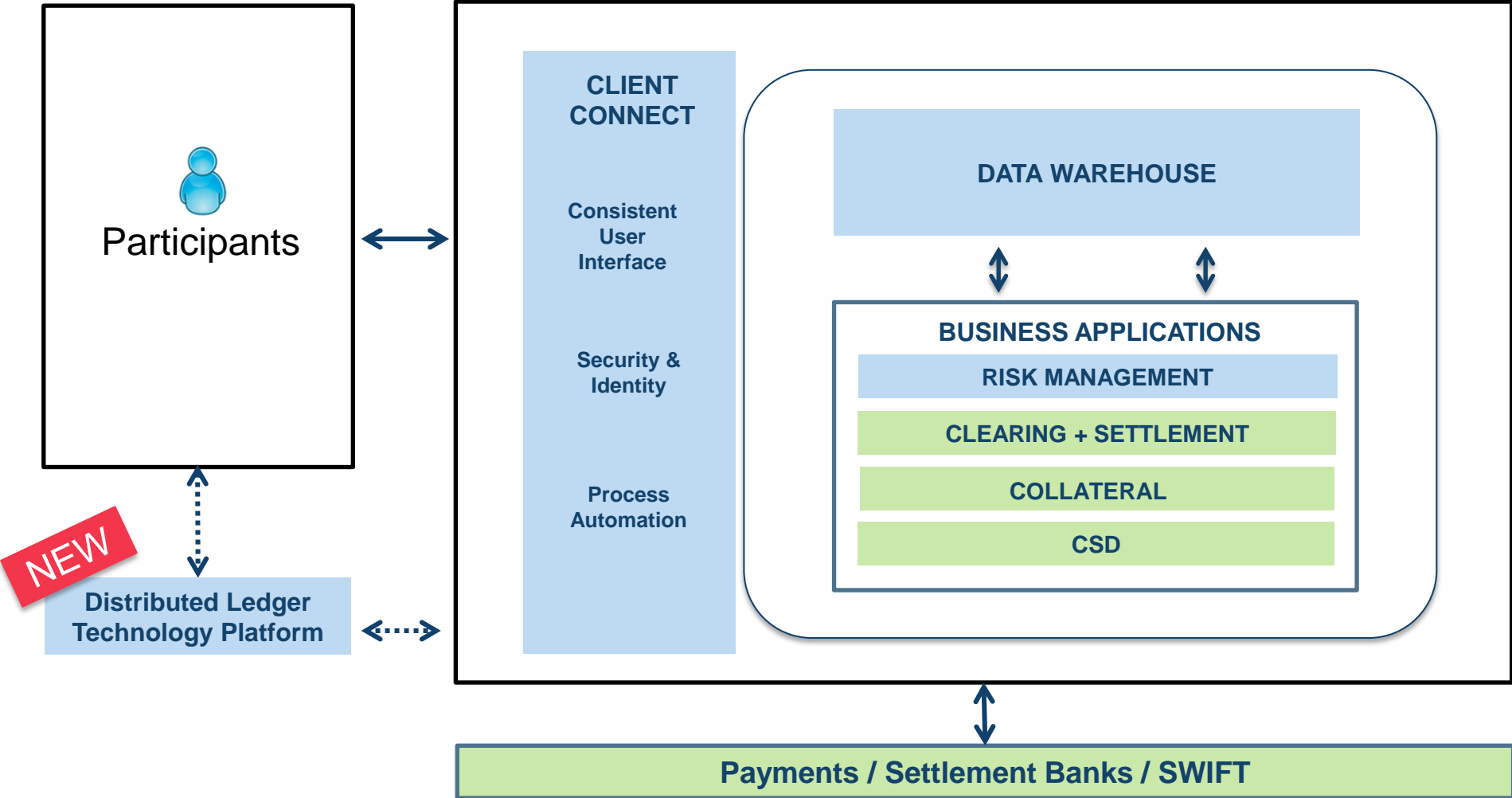


Driven by new technology



NEXTGEN POST TRADE PLATFORM

Phase 1 Phase 2





CLIENT CONNECT

CLIENT CONNECT

A single web portal to centralize participant access:

1. Entry portal for the Clearing house services and NextGen applications
2. Digitizing the majority of paper-based services
3. Event and information dashboard
4. Secure web-based user interface made available via PC, tablet, and mobile.
5. Flexible access control and management of roles

The screenshot displays the HKEEX Client Connect web portal. The top navigation bar includes the HKEEX logo, the user name 'Welcome, KwokFai', and the last login time 'Last Login: 13-Nov-2018 01:30 HKT'. Below the navigation bar, there are tabs for 'Tasks', 'Notifications', 'Events', and 'History'. The main content area features a table with columns for 'Classification', 'Company Participant ID', 'Details', 'Last Update Date', and 'Job Status'. The table lists several tasks, including 'Buy-in', 'AC Maintenance', 'Company Admin', and 'Buy-in' for various companies like Goldman Sachs, Standard Chartered, and BOCOM International. Below the table, there are sections for 'HKEEX CALENDAR' (showing a calendar for November 2018), 'WHAT'S ON' (listing events like RMB FIC Conference 2018, LME Asia Week 2018, and The Stock Connect Awards - Northbound), and 'RESOURCE AREA' (listing infrastructure, PFMI, HKSCC, HKCC, SEDCH, OTC Clear, and Rules). The footer contains the HKEEX logo and links for Site Maintenance, Contact, FAQ, Site Map, Disclaimer, Hyperlink Policy, and Terms & Conditions.



*Client Connect is now the official name of Client Portal
** Trading services to be included

DASHBOARD

Quick search on eServices

Company profile and account information



HKEX
香港交易所

e-Service

POST-TRADE

- Clearing
- Settlement & Depository
- Participanship Management
- Technical Setup

Support

eSERVICES REPORTING

Welcome, uc

Search icons: magnifying glass, notification bell, globe, EN, xyz, user profile

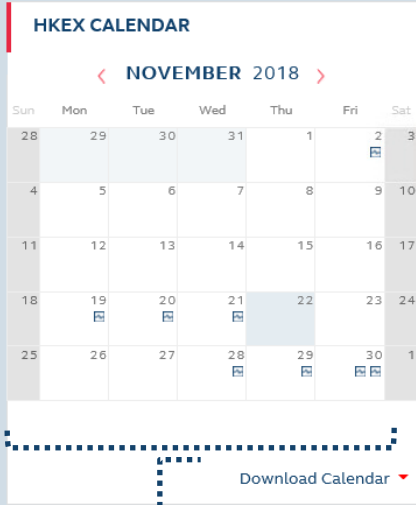
Tasks **Notifications** Events History

Mark all as read

Classification	Details	Timestamp
Reports	AC 6 Special Segregated Account and Designated Executing Broker Maintenance Request to HKSCC Submission Status Report / Daily is successfully generated at 21-Nov-2018 05:45:00 PM	21-Nov-2018 17:45 HKT
Reports	AC 6 Special Segregated Account and Designated Executing Broker Maintenance Request to HKSCC Submission Status Report / Daily is successfully generated at 21-Nov-2018 05:45:00 PM	21-Nov-2018 17:45 HKT

View all notifications >

Main menu for eServices



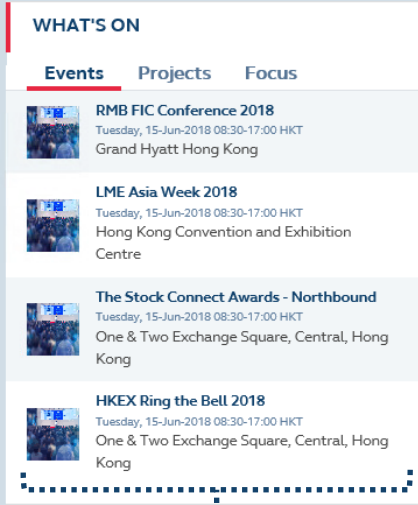
HKEX CALENDAR

< NOVEMBER 2018 >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1

Download Calendar ▾

Important dates and events

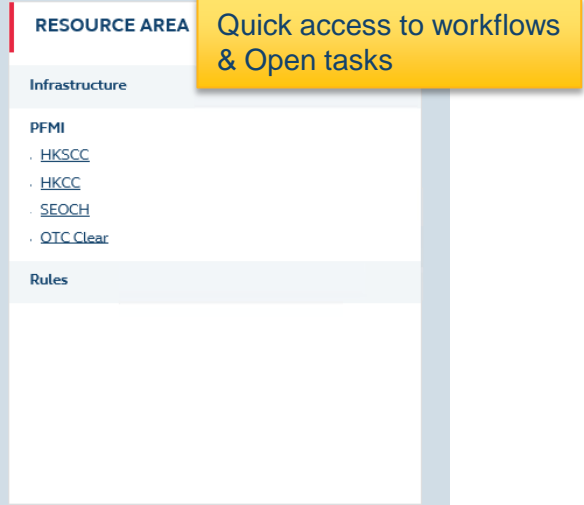


WHAT'S ON

Events **Projects** Focus

- RMB FIC Conference 2018**
Tuesday, 15-Jun-2018 08:30-17:00 HKT
Grand Hyatt Hong Kong
- LME Asia Week 2018**
Tuesday, 15-Jun-2018 08:30-17:00 HKT
Hong Kong Convention and Exhibition Centre
- The Stock Connect Awards - Northbound**
Tuesday, 15-Jun-2018 08:30-17:00 HKT
One & Two Exchange Square, Central, Hong Kong
- HKEX Ring the Bell 2018**
Tuesday, 15-Jun-2018 08:30-17:00 HKT
One & Two Exchange Square, Central, Hong Kong

HKEX's focused items in 'What's on' Events tab



RESOURCE AREA

Infrastructure

PFMI

- [HKSCC](#)
- [HKCC](#)
- [SEOCH](#)
- [QTC Clear](#)

Rules

Quick access to workflows & Open tasks



USER EXPERIENCE

- Built-in intelligence to auto-fill and validate input, reducing duplication and errors
- Segregation of user access by job responsibilities

CONTACT INFORMATION

Name of Contact Person	Stock Code
<input type="text" value="ub xyz"/>	<input type="text" value="20"/>
	Please enter a valid stock code.
Email Address	Stock Name
<input type="text" value="ub@xyz.com"/>	<input type="text" value="HKEX"/>
	Please enter a valid stock name.
Telephone Number	Settlement Pos No. <small>e.g. P12345678</small>
<input type="text" value="12345678"/>	<input type="text" value="P1545155"/>
	Please enter Valid Settlement Pos No as Pxxxxxxx

Information auto-filled according to user profile; System performs input validation and alert users

Home /

Settlement & Depository

Settlement - Securities Depository Services Common Nominee Services

Classification	Id	Function	Format	Reference
Buy-in	Set 1	Application to HKSCC for Exemption of Buy-in	<input type="button" value="eService"/>	
Buy-in	Set 2	Early Buy-in Request to HKSCC	<input type="button" value="eService"/>	
Buy-in	Set 4	Buy-in Request to HKSCC for CCASS Isolated Trades only	<input type="button" value="eService"/>	

Access to eServices is determined by access rights

CLIENT CONNECT eSERVICES (RELEASE ONE)

	Examples
Membership Management	<ul style="list-style-type: none">• DCASS Account Request to HKCC/SEOCH
Technical Setup	<ul style="list-style-type: none">• CCASS/CCMS SDNet Line Services Notifications
Settlement Depository	<ul style="list-style-type: none">• Early Buy-in Request to HKSCC

Approximately 45 eServices will be introduced in Client Connect by phases consolidating over 60 existing physical forms, significantly improving participant experience



CLIENT CONNECT



First half 2019 focus on Client Engagement





SINGLE RISK ENGINE

MULTI ASSET SINGLE RISK ENGINE

Phase I – Cash

- Initial rollout of VaR-based Risk Model
- Improved Risk management
- Continuous monitoring of Risk
- Margin simulator
- New User Interface

Phase II - Derivatives

- VaR model enhanced for derivatives
- Portfolio margining





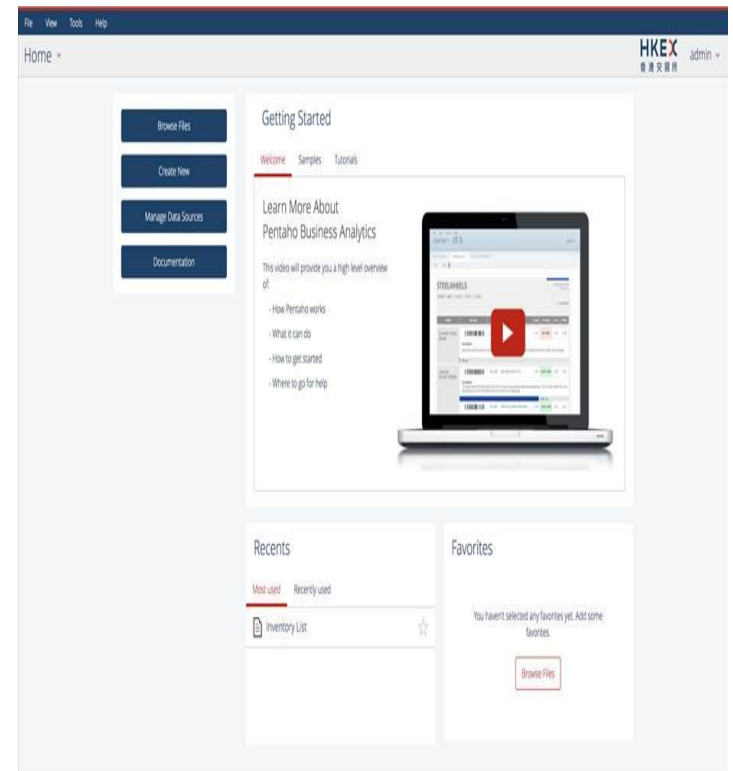
**DATA WAREHOUSE &
BUSINESS INTELLIGENCE**

Data Warehouse & Business Intelligence

Allows Clients and HKEX to better manage their businesses

- Provides business intelligence and analytics for clients and ourselves to gain insight into our market and performance
- Offers a Dashboard to collate and display data and reports, a full query analytical tool, and powerful reporting capabilities
- Automated, machine readable reports – CSV files etc.
- New tools and services to CPs such as interactive queries

Data Warehouse	<ul style="list-style-type: none">- Centralized data repository- Interfacing capability with data sources (e.g. Legacy and new post trade systems including market data).
Business Intelligence	<ul style="list-style-type: none">- Customizable dashboards- Interactive queries and analysis tool and associated visualizations in form of reports- Role based access control to functions and data
Services	<ul style="list-style-type: none">- Data modelling, automated, machine readable reports- New tools and services to CPs and internal users, such as interactive queries



Phased approach starting with internal deliveries





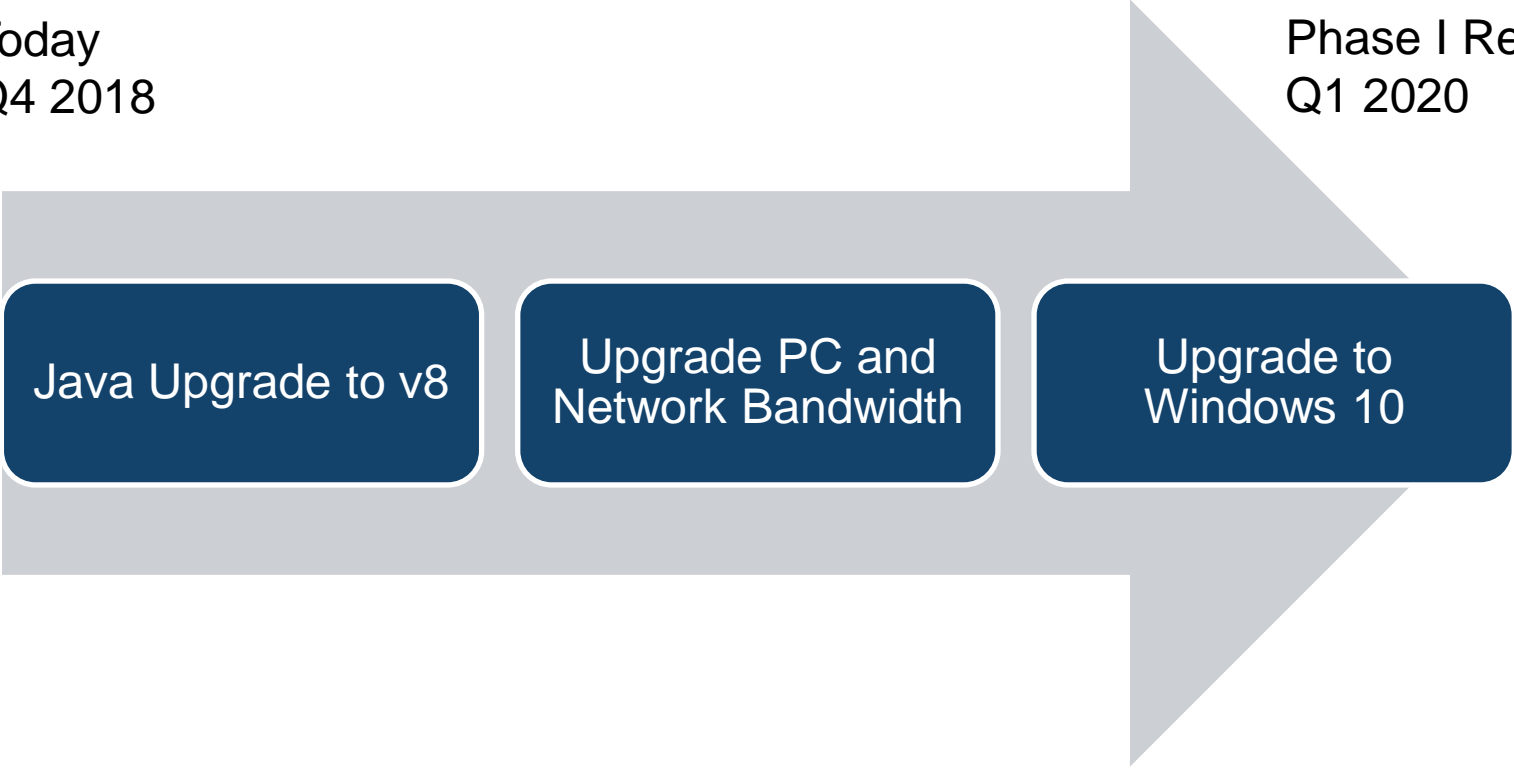
SYSTEM REQUIREMENTS

FRIENDLY REMINDER : PC UPGRADE FOR CCASS/3 TERMINAL

IT PC Upgrade Roadmap from current to future state

Today
Q4 2018

Phase I Release
Q1 2020



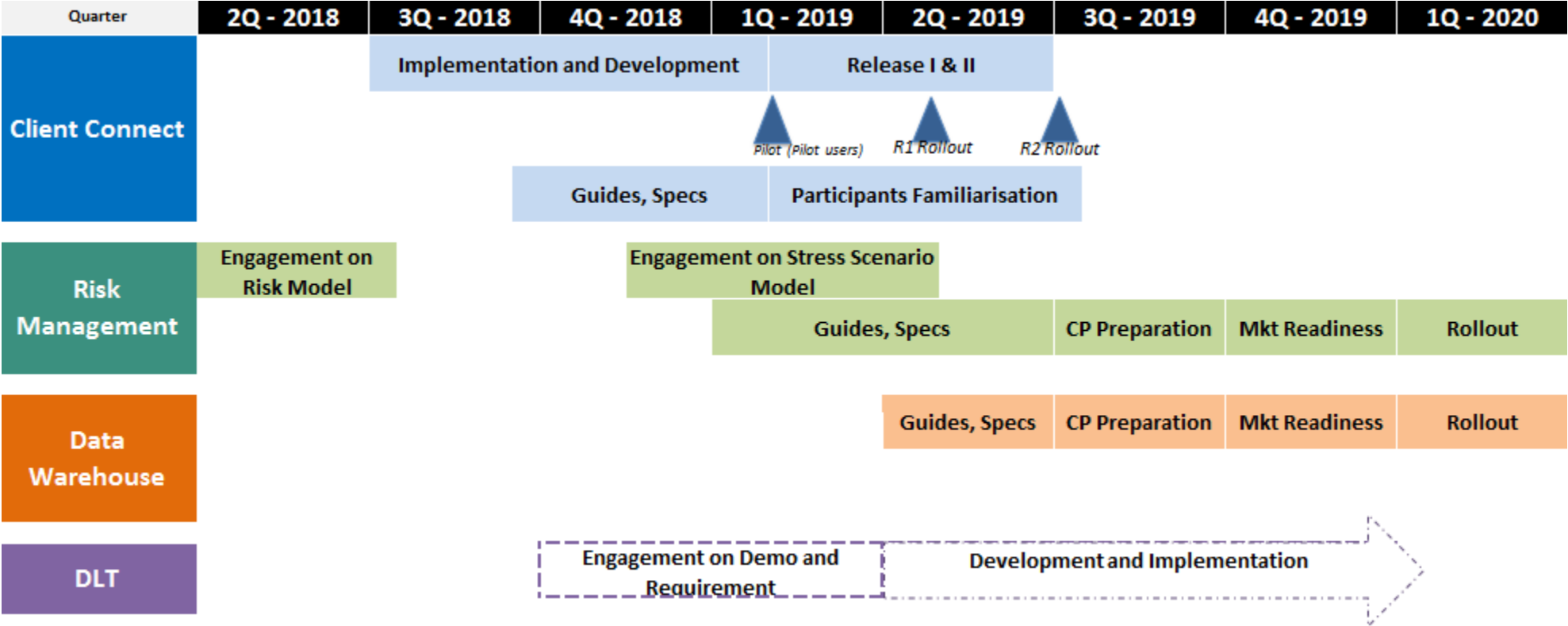
Please refer to C3T and Technology related Circular for details





TIMELINE

NEXTGEN (PHASE ONE) TIMELINE



*All Indicative rollout dates and subject to change at HKEX discretion



NEXTGEN DOCUMENT UPDATES

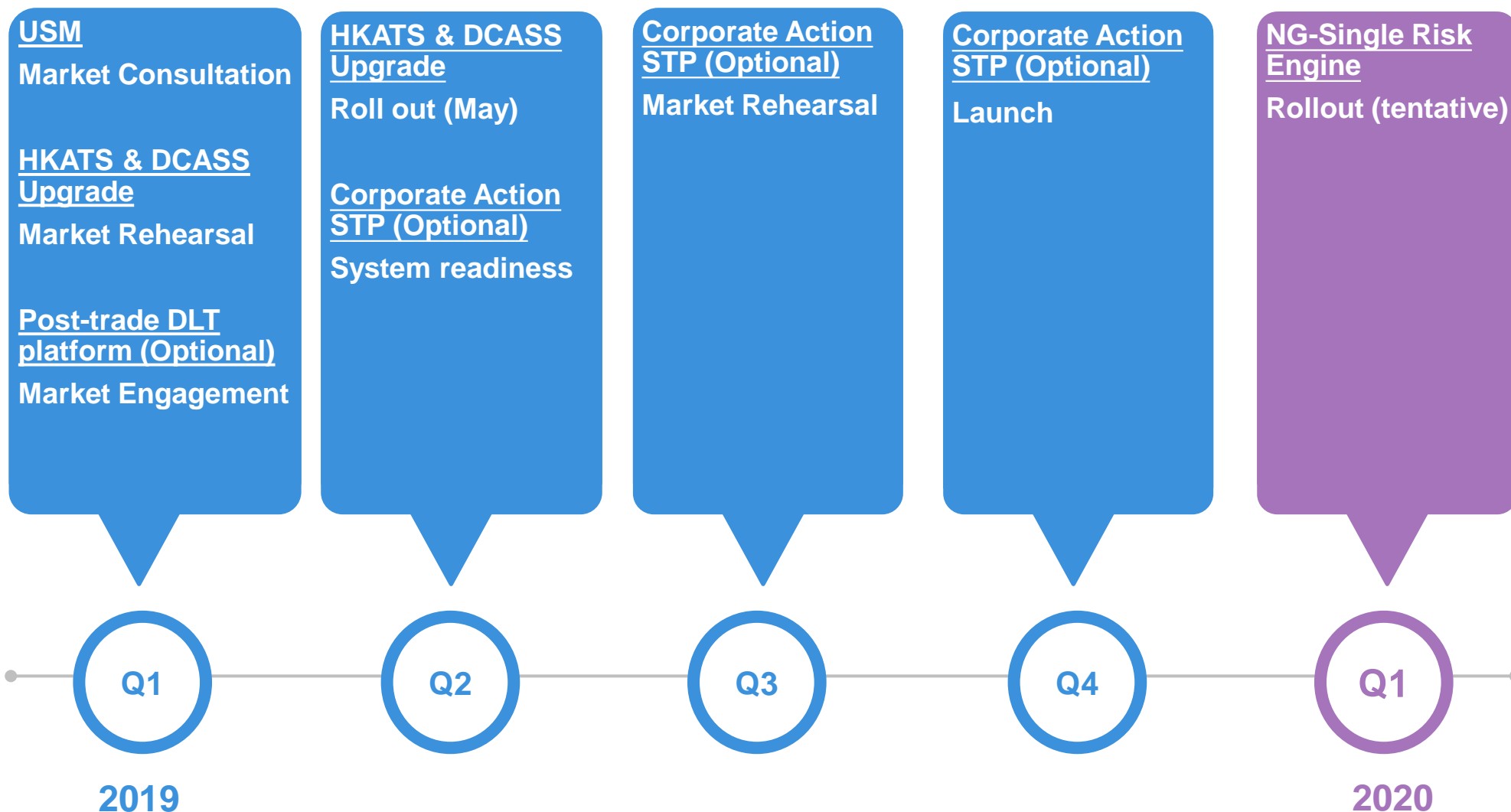
2018 Released	2018 Q4	2019 1H
<p><u>NextGen Post Trade Programme</u></p> <ul style="list-style-type: none"> Townhall Presentation Material NextGen FAQ <p><u>Client Connect</u></p> <ul style="list-style-type: none"> Service Overview/ eService Coverage <p><u>Risk Model</u></p> <ul style="list-style-type: none"> Seminar Material Deep Dive Workshop Material FAQ 	<p><u>NextGen Post Trade Programme</u></p> <ul style="list-style-type: none"> Town hall Presentation update <p><u>Client Connect</u></p> <ul style="list-style-type: none"> Briefing Materials User Onboarding Documents Familiarization Guidelines FAQ and User Manual 	<p><u>Risk Model</u></p> <ul style="list-style-type: none"> VaR Parameter file and User Guide Default Fund Calculation Model Guide Risk Management User Interface Report Download (User Guide, Admin Guide) SFTP Connectivity Information <p><u>Data Warehouse</u></p> <ul style="list-style-type: none"> Factsheet and Descriptions

Documents will be made available at following link https://www.hkex.com.hk/Services/Next-Generation-Post-Trade-Programme/Overview?sc_lang=en and will be announced to all subscribers as notification alert



**All Indicative rollout dates and subject to change at HKEX discretion*

CLEARING KEY PROJECTS AND INITIATIVES ROADMAP 2019/2020 Q1



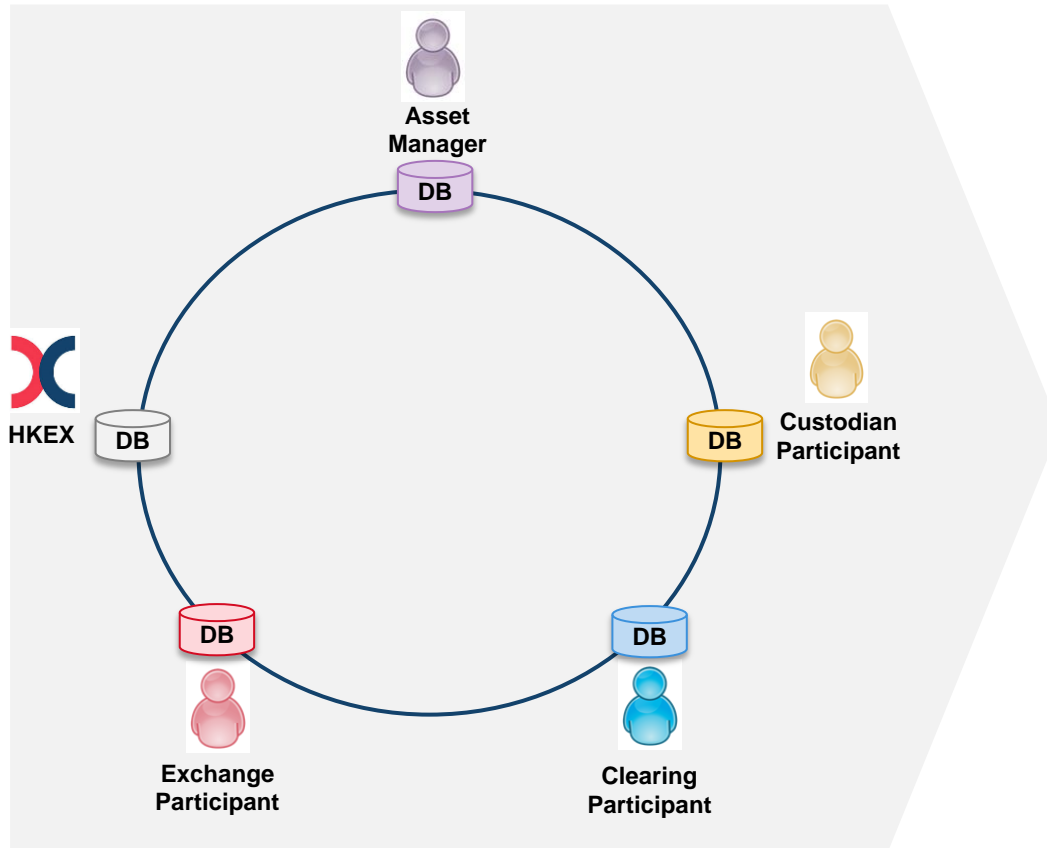
Note: all are indicative timelines and subject to change at HKEX discretion



**DLT PLATFORM
(OPTIONAL SERVICE)**

DLT PLATFORM (OPTIONAL SERVICE) - OUR OBJECTIVES

Leverage Distributed Ledger Technology (DLT)



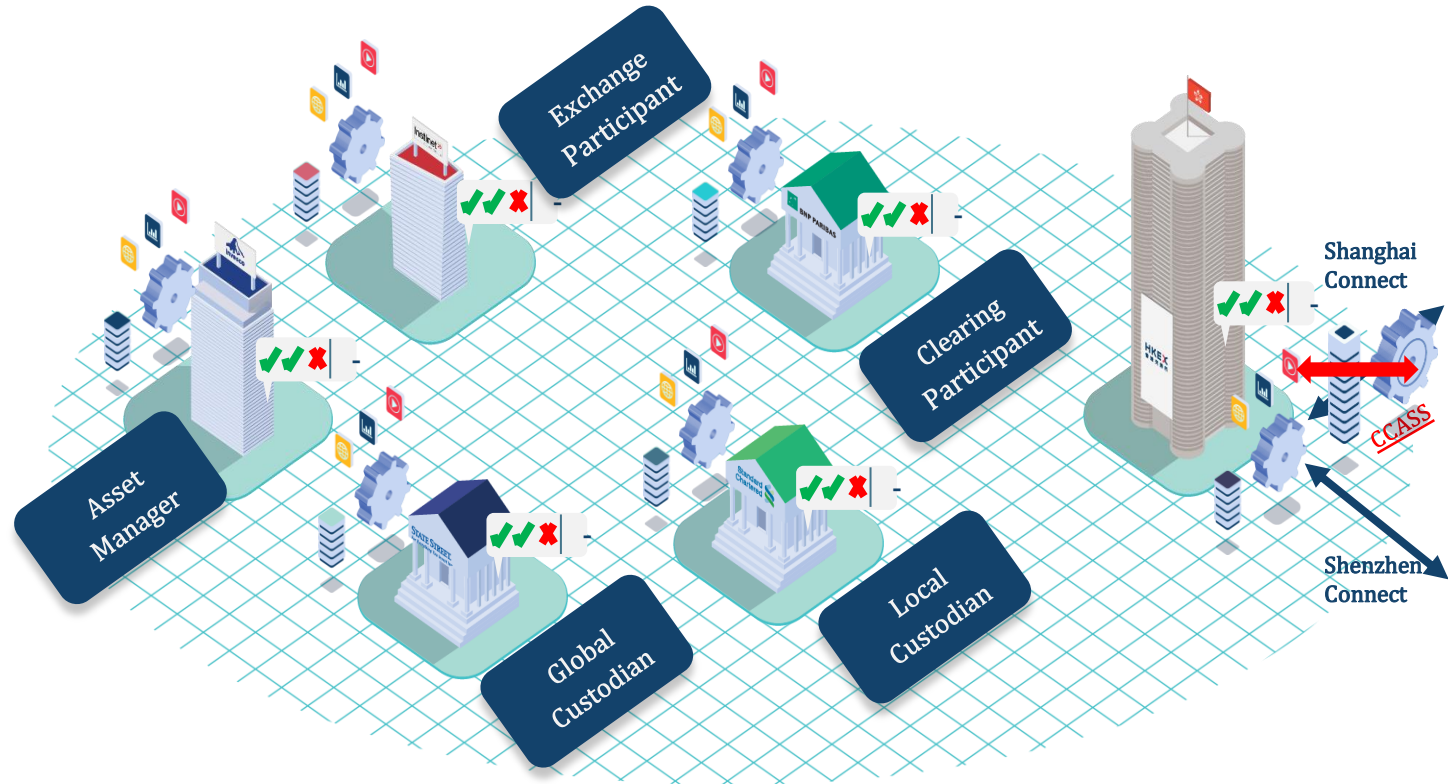
- Facilitate Stock Connect Northbound short settlement cycle with an innovative technology
- To better support increasing turnover and Asset Managers interests
- Collaboration with a key group of market participants
- Optional value added services for interested Participants

HKEX to explore the development of a blockchain-powered post-trade allocation and processing platform

DLT PLATFORM (OPTIONAL SERVICE) - STOCK CONNECT

Accelerating and simplifying pre-settlement processing to reduce risk

- Access to the permissioned DLT network with full visibility of the end to end pre-settlement flow
- Post trade parallel processing is now possible
- Synchronization on status of settlement amongst the market participants
- Offers opportunities for further collaboration in the future
- Optional service for post-trade ecosystem





CLIENT ENGAGEMENT

FOR FURTHER INFORMATION

NEXTGEN UPDATE

- 1) NextGen Post Trade Programme notification alert
- 2) Submit online enquiry on NextGen Post Trade Programme
- 3) Contact NG Post-Trade Business Development Team

Website: https://www.hkex.com.hk/Services/Next-Generation-Post-Trade-Programme/Overview?sc_lang=en

Email: NG_PostTrade@hkex.com.hk

The screenshot displays the HKEX website's 'NextGen Post Trade Programme Overview' page. The page features a dark blue header with the HKEX logo and navigation tabs for 'MARKET DATA', 'PRODUCTS', 'SERVICES', 'LISTING', 'NEWS', and 'MUTUAL MARKET'. The main content area is divided into a left sidebar with a 'Services' menu and a main 'OVERVIEW' section. The 'OVERVIEW' section includes an 'INTRODUCTION' with text about the infrastructure upgrade, a 'DOCUMENT LIST FOR CLEARING PARTICIPANTS' section with a link to 'NextGen Post Trade Programme Documentation for Clearing Participants', and a 'FURTHER INFORMATION' section. The sidebar menu includes items like 'Trading', 'Connectivity', 'Market Data Services', 'Rules, Forms & Fees', 'Clearing', 'Settlement and Depository', 'NextGen Post Trade Programme', 'Overview', 'NextGen Risk Management', 'Client Connect', 'Circulars & Notices', 'Trading Hours & Severe Weather Arrangements', 'Become a Participant', 'Market Open Ceremony / Market Closing Ceremony', and 'RSS Feeds'.



Q&A

Thank you for your support

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