NEXT GENERATION POST TRADE PROGRAMME UPDATE

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Next Generation Post-Trade Platform
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04 Dec 2018
NEXTGEN POST TRADE PLATFORM
NEXTGEN KEY DRIVERS

Our drivers are simple:

- Reduce cost for the market
- Reduce risk for the market
- Improve service
- Participants can better manage & control their business

Driven by new technology
NEXTGEN POST TRADE PLATFORM

Participants

Distributed Ledger Technology Platform

NEW

PHASE 1

Payment / Settlement Banks / SWIFT

PHASE 2

CLIENT CONNECT

Consistent User Interface

Security & Identity

Process Automation

DATA WAREHOUSE

BUSINESS APPLICATIONS

RISK MANAGEMENT

CLEARING + SETTLEMENT

COLLATERAL

CSD
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

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

• Built-in intelligence to auto-fill and validate input, reducing duplication and errors

• Segregation of user access by job responsibilities

Information auto-filled according to user profile; System performs input validation and alert users
Approximately 45 eServices will be introduced in Client Connect by phases consolidating over 60 existing physical forms, significantly improving participant experience.
CLIENT CONNECT

Familiarization sessions

Demo and Play around sessions

Online Introduction

Workshops

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

<table>
<thead>
<tr>
<th>Data Warehouse</th>
<th>Business Intelligence</th>
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<tbody>
<tr>
<td>- Centralized data repository</td>
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<td>- Interfacing capability with data sources (e.g. Legacy and new post trade systems including market data.)</td>
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<tr>
<td>- Customizable dashboards</td>
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<td>- Interactive queries and analysis tool and associated visualizations in form of reports</td>
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<tr>
<td>- Role based access control to functions and data</td>
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<td>- Data modelling, automated, machine readable reports</td>
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<td>- New tools and services to CPs and internal users, such as interactive queries</td>
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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

- Java Upgrade to v8
- Upgrade PC and Network Bandwidth
- Upgrade to Windows 10

Please refer to C3T and Technology related Circular for details
NEXTGEN (PHASE ONE) TIMELINE

*All Indicative rollout dates and subject to change at HKEX discretion
## NEXTGEN DOCUMENT UPDATES

<table>
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<tr>
<th>2018 Released</th>
<th>2018 Q4</th>
<th>2019 1H</th>
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<tr>
<td><strong>NextGen Post Trade Programme</strong></td>
<td><strong>NextGen Post Trade Programme</strong></td>
<td><strong>Risk Model</strong></td>
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<tr>
<td>• Townhall Presentation Material</td>
<td>• Town hall Presentation update</td>
<td>• VaR Parameter file and User Guide</td>
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<td>• NextGen FAQ</td>
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<td>• Default Fund Calculation Model Guide</td>
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<tr>
<td><strong>Client Connect</strong></td>
<td><strong>Client Connect</strong></td>
<td>• Risk Management User Interface</td>
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<tr>
<td>• Service Overview/eService Coverage</td>
<td>• briefing Materials</td>
<td>• Report Download (User Guide, Admin Guide)</td>
</tr>
<tr>
<td><strong>Risk Model</strong></td>
<td><strong>Risk Model</strong></td>
<td>• SFTP Connectivity Information</td>
</tr>
<tr>
<td>• Seminar Material</td>
<td>• User Onboarding Documents</td>
<td>Data Warehouse</td>
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<tr>
<td>• Deep Dive Workshop Material</td>
<td>• Familiarization Guidelines</td>
<td>• Factsheet and Descriptions</td>
</tr>
<tr>
<td>• FAQ</td>
<td>• FAQ and User Manual</td>
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*All Indicative rollout dates and subject to change at HKEX discretion*

Documents will be made available at following link [https://www.hkex.com.hk/Services/Next-Generation-Post-Trade-Programme/Overview?sc_lang=en](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.
Note: all are indicative timelines and subject to change at HKEX discretion.
DLT PLATFORM
(OPTIONAL SERVICE)
DLT PLATFORM (OPTIONAL SERVICE) - OUR OBJECTIVES

- 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
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
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
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