

Ecosystem Forum 2014

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Key Topics Today



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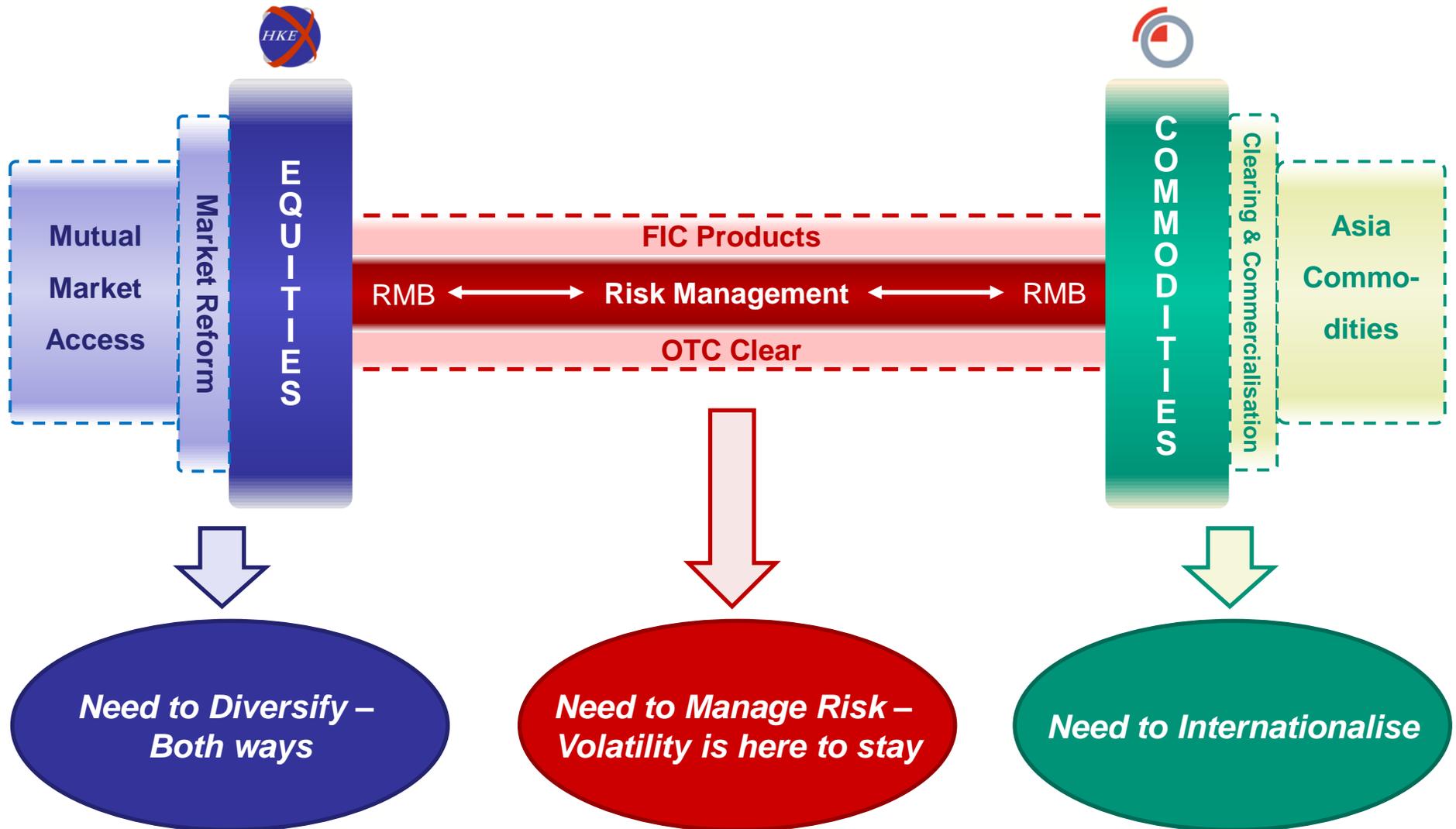


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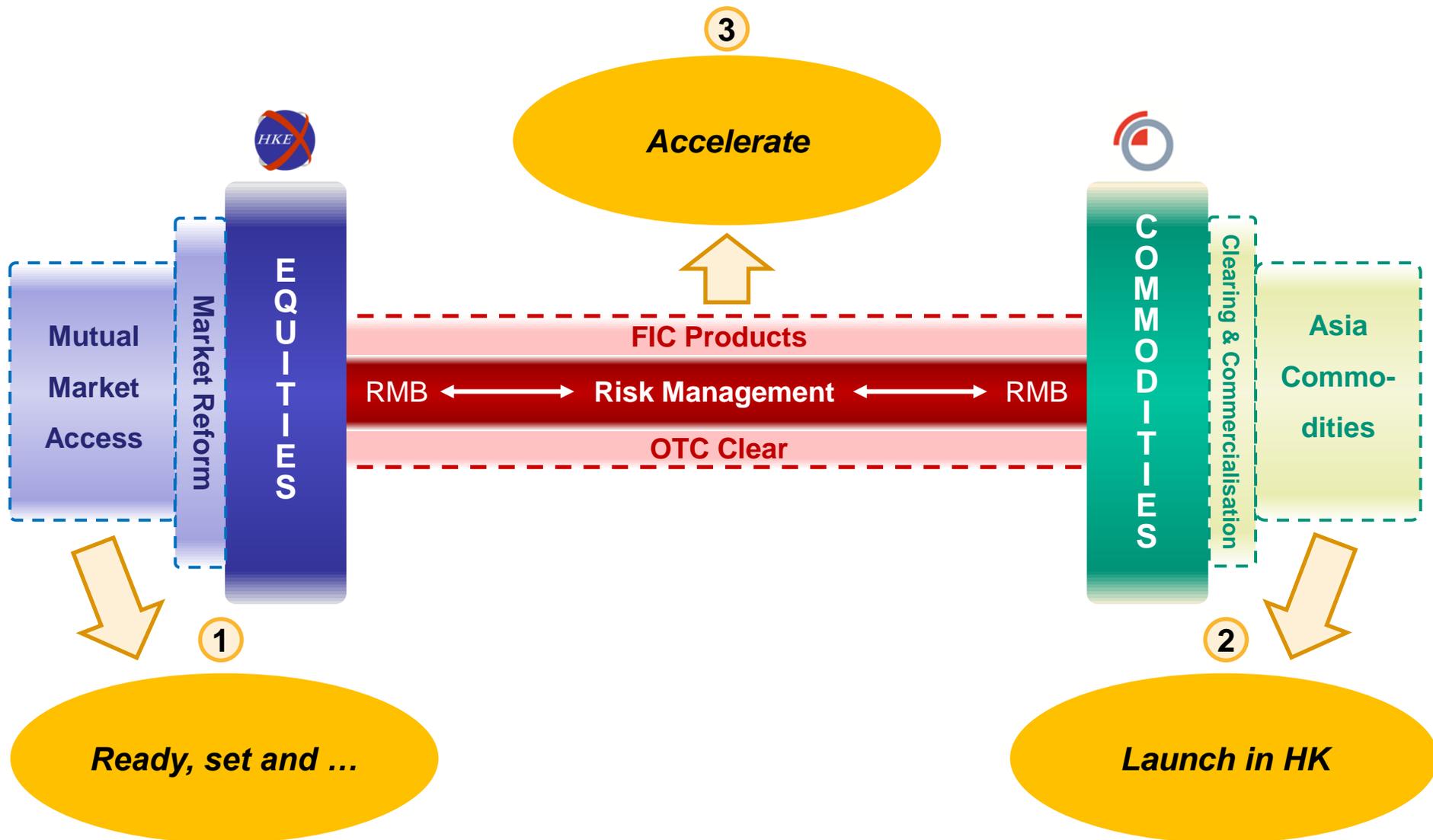
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2014 HKEx Corporate Strategy

Creating A Holistic Value Proposition for Hong Kong to Ride On China's Opening Up



Key Goal of 2014





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HKEx Orion Programme – Feb '14

HKEx's Orion Technology Initiatives

Status Update

Feb 2014

Introduction

The HKEx Orion Technology Initiatives are a transformative programme of projects comprising new platforms and facilities that will further elevate HKEx's position as a leading global exchange.



What do the HKEx Orion Technology Initiatives mean to me?

Many of the initiatives have already come to fruition in 2013, and more are planned to be launched in 2014. This update is intended to provide participants in Hong Kong's trading community with an overview of the programme to help resource planning during this critical roll-out period. It also gives a description of the further technology initiatives that HKEx is planning beyond 2014.

This report contains:

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This is the third status update for the HKEx Orion Technology Initiatives

The Need for Change

Hong Kong is part of a global and competitive financial system, and technology drives financial markets. For Hong Kong to retain and strengthen its position as a leading financial centre, HKEx is committed to investing in the future through technology to remain competitive.



Why does Hong Kong need the HKEx Orion Technology Initiatives?

Facing the challenges of tomorrow

The Hong Kong market enjoyed spectacular growth in the decade from 2000 – 2010 based largely on the capital raising needs of Mainland China. This happened by virtue of time and location, and with minimal investment by HKEx in IT platforms.

The world is now a different place and Hong Kong needs to adapt to maintain its unique value position in greater China and the global financial market:

- Financial markets are global, and Hong Kong must be globally competitive.
- Mainland China is changing from being a net importer of capital to a net exporter and the RMB is making rapid advances towards becoming a reserve currency. Hong Kong must strive to remain at the forefront of this evolution.
- Hong Kong can no longer rely on equities only for its growth. Diversification into other global asset classes such as commodities can build a more sustainable future.

HKEx's Orion Technology Initiatives are a major capital investment aimed at positioning Hong Kong to capture these unique opportunities.

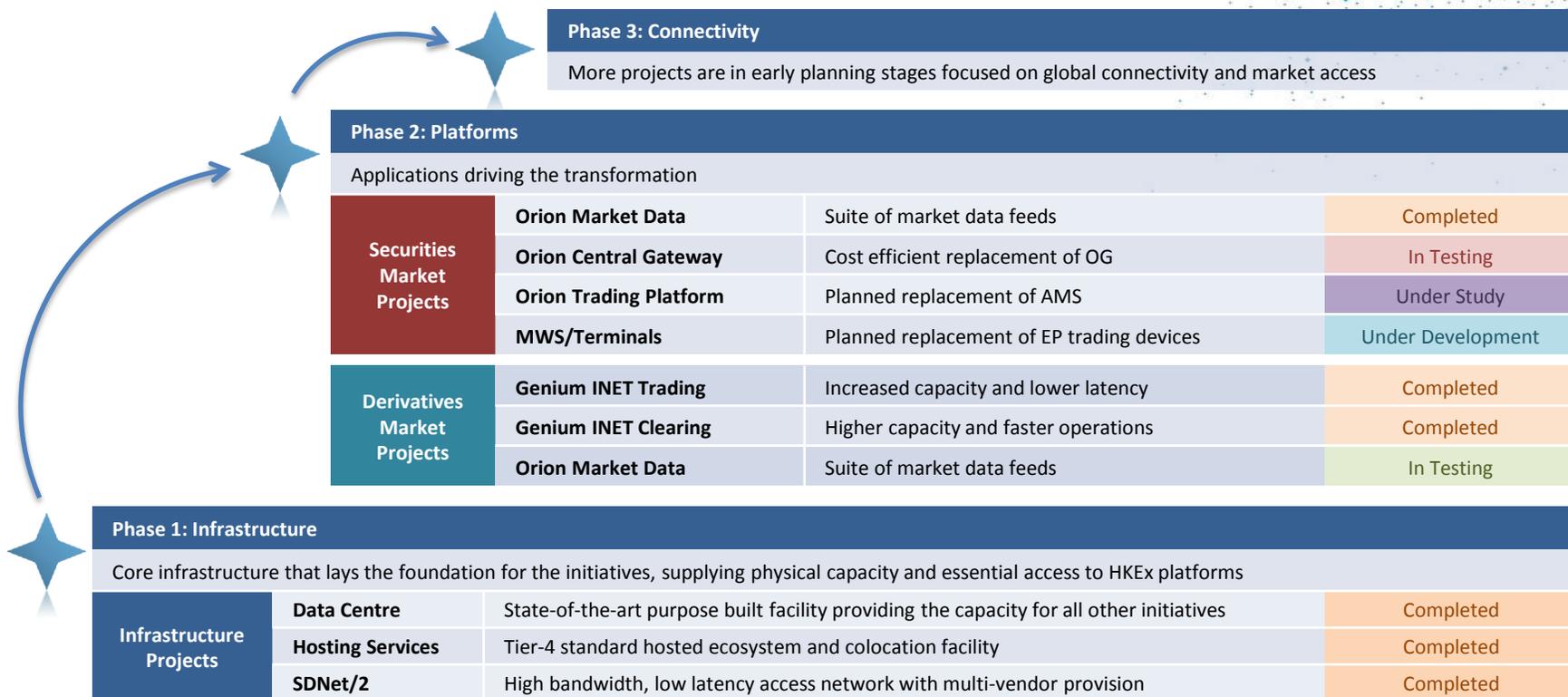
Building opportunities for participants

The HKEx Orion Technology Initiatives will support the next chapter of Hong Kong's development which will benefit all market participants.

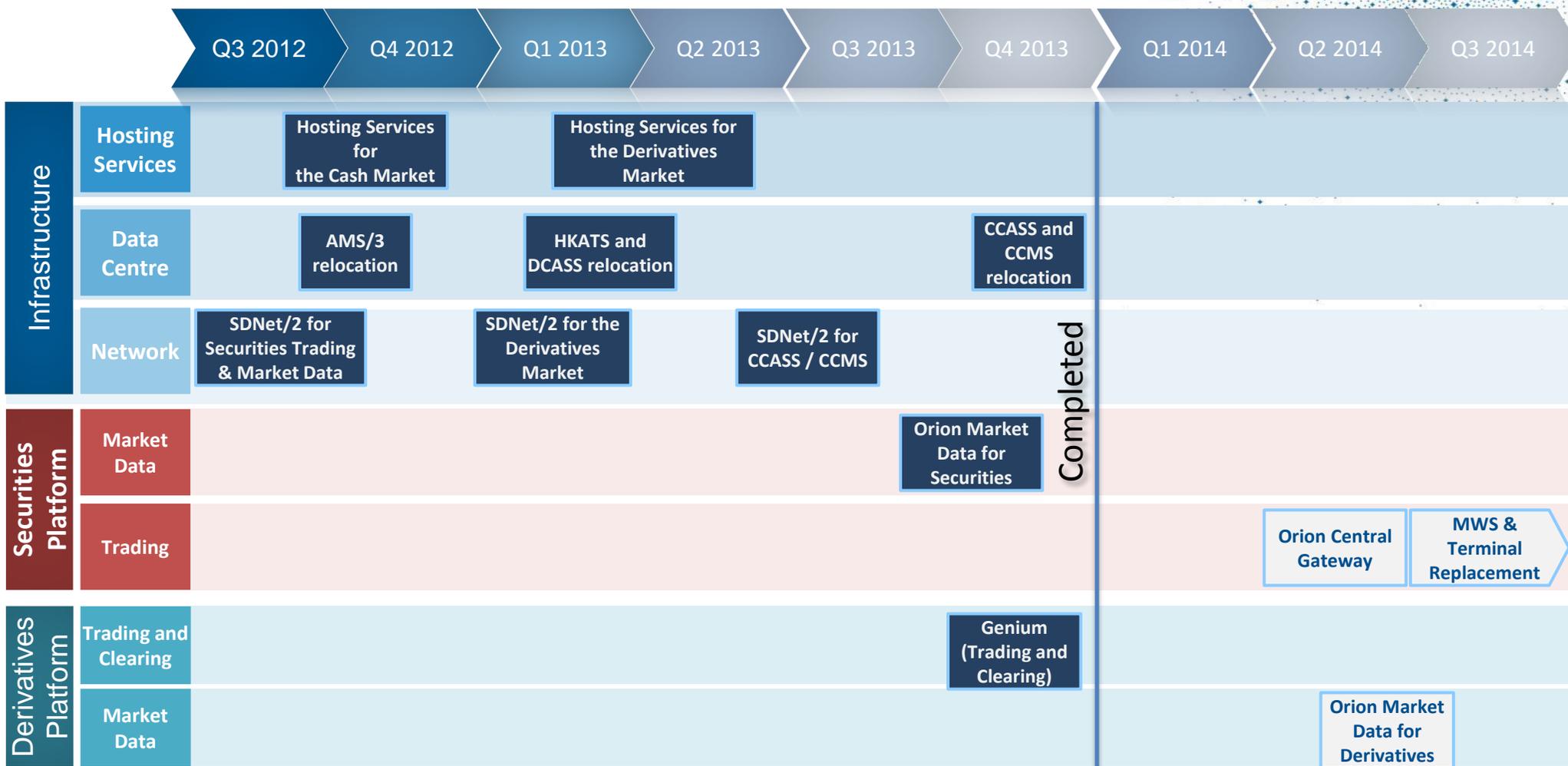
- The initiatives progressively transform HKEx's trading infrastructure to bring efficiencies to participants.
- The initiatives recognize the diverse needs of the market and move away from the "one size fits all" model. Participants will be able to make choices in the services they subscribe to according to the needs of the business.
- The initiatives support the development of existing markets, and open up new markets and new business opportunities.

The Programme at a Glance

A Phased Transformation – HKEx’s Orion Technology Initiatives can be broken down into three overlapping phases, delivering incremental benefits through the transformation.



The Programme at a Glance



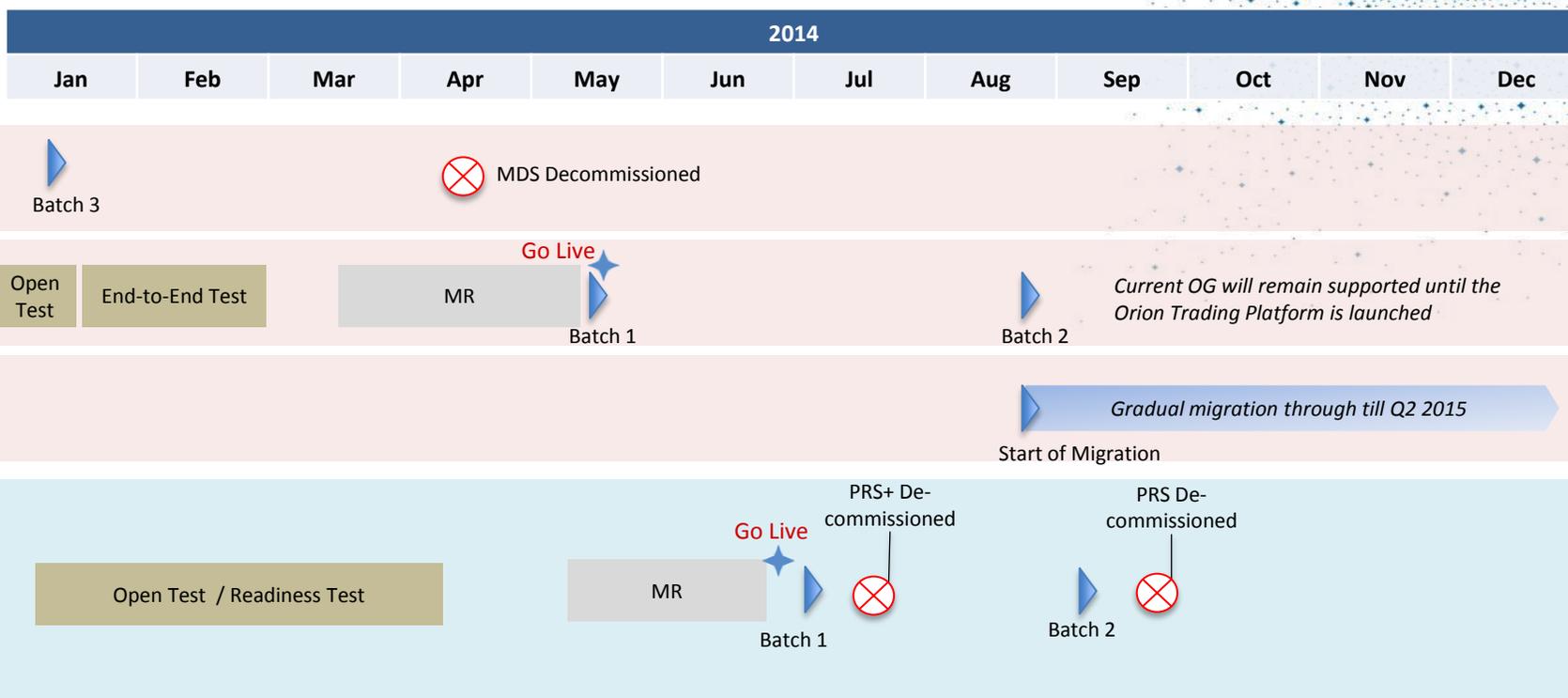
Achievements in Q4 2013



What has been achieved in Q4 2013?



In-Flight Projects Timeline



Note: All dates illustrated above are tentative for indication only. Confirmed dates will be issued by circular.

"MR" = Market Rehearsal

Project Update – Orion Central Gateway

Synopsis	The Orion Central Gateway is a centralised access point enabling Exchange Participants to connect their order management / trading systems to HKEx's securities trading system. It is an optional replacement for the existing Open Gateway.
Users Impacted	Exchange Participants in the Securities Market
Objectives	<ul style="list-style-type: none"> ■ Elimination of HKEx footprint in EP premises ■ Higher capacity ■ Reduced cost through hardware elimination and network consolidation ■ Lower latency ■ Separation of trading from market data (all market data will be sourced from OMD)
Resources	http://www.hkex.com.hk/ocg

On-Boarding Schedule

<u>Activity</u>	<u>Date</u>
OCG Open Test	From 9 Dec 2013
OCG End-to-End Test	From 20 Jan 2014
Connectivity Test	March 2014
Rollout Test	April 2014

Project Manager's Report

The OCG testing environment has been opened for batch 1 EPs and BSS vendors to conduct testing since Dec 2013. The official End-to-End testing will be completed on 28 Feb 2014. Market Rollout Tests will be arranged based on testing results from the End-to-End period tentatively from April 2014.

EPs should note:

- EPs are advised to arrange production line setup according to the Market Rehearsal schedule.

Note: All future dates above are tentative for indication only. Confirmed dates will be issued by circular.

Project Update – MWS/Terminal Replacement

Synopsis	The current AMS Terminals and Multi-Workstation System (MWS) have been used by many exchange participants since 1993 and 2000 respectively. With the improvement of technology, it is an appropriate time to move to a new trading device which will be more modern in design and compatible with the Orion Technology Platforms.
Users Impacted	Exchange Participants in the Securities Market
Objectives	<ul style="list-style-type: none">■ More modern design and improved functionality■ Higher resilience■ Compatible with the Orion Central Gateway and Orion Market Data
Resources	http://www.hkex.com.hk/NSTD

Project Schedule

<u>Activity</u>	<u>Date</u>
Enrollment	Q2 2014
Migration	From Q3 2014

Project Manager's Report

HKEx appointed an Independent Software Vendor to provide a new securities trading device. Most of the existing “look-and-feel” will be preserved, while introducing some new improved features (e.g. real-time charts, multiple screens). Development is in progress. Detailed arrangements of the enrollment and migration will be announced in due course.

Note: All future dates above are tentative for indication only. Confirmed dates will be issued by circular.

Project Update – Orion Market Data for Derivatives

Synopsis	The HKEx Orion Market Data Platform (“OMD”) is an integrated low-latency platform delivering market data for all asset classes traded on HKEx markets in a common message format. OMD will be implemented on Derivatives Market (“OMD-D”) after its first deployment on the Securities Market (previous report). OMD will replace the existing PRS/PRS Plus system currently used to supply Information Vendors with market data in the Derivatives Market.
Users Impacted	All Information Vendors and any Exchange Participants in the Derivatives Market currently subscribing to PRS/PRS-Plus
Objectives	<ul style="list-style-type: none"> ■ Suite of market data products to meet diverse customer needs ■ Ultra-low latency pricing information
Resources	http://www.hkex.com.hk/eng/prod/dataproduct/omd/Phase2.htm

On-Boarding Schedule

<u>Activity</u>	<u>Date</u>
OMD-D Open Test	Q1 – Q2 2014
OMD-D Readiness Test	Q1 – Q2 2014
Market Rehearsal	Q2 2014

Project Manager’s Report

OMD-D testing environment has been opened for clients to conduct Open Test and Readiness Test till April 2014. Market Rehearsals will be arranged after completion of Readiness Test.

Existing clients of the legacy PRS/PRS Plus market datafeeds should note that these legacy market datafeeds will be decommissioned shortly after OMD-D rollout. Clients should therefore plan for migration to OMD-D following the on-boarding schedule shown.

Note: All future dates above are tentative for indication only. Confirmed dates will be issued by circular.

Looking forward with Orion

The following information is provided to assist participants in their forward planning. Any information provided here is subject to change as plans evolve

Securities Platform	Orion Central Gateway	<ul style="list-style-type: none">■ The initial release planned for Q2 2014 will exclude support of semi-automatic matching for the Odd Lot and Special Lot Market. Messages for semi-automatic matching are planned to be released in Q3 2014. The messages will support the current Odd Lot and Special Lot Market mechanism which is planned to be revised with the introduction of the Orion Trading Platform (see below), so this should be considered an interim measure.
	Orion Trading Platform	<ul style="list-style-type: none">■ The “Orion Trading Platform” is the planned successor for the current AMS trading platform. Initial feasibility work is being undertaken. Deployment would not take place until 2016 at the earliest. This would be a back end trading system replacement. The participant-facing components (i.e. Orion Market Data and Orion Central Gateway) would be retained.



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2014 Hosting Services Focuses

Q & A