

HKEX Trading Operations



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01 - Background

- HKEX implemented Orion Central Gateway (OCG) to replace the legacy AMS/3 Open Gateway for Hong Kong securities market back in 2014.
 Orion Trading Platform – Securities Market (OTP-C) then replaced AMS/3.8 as the new securities trading system in 2018.
- OCG platform will reach 7-year of age by 2021. To meet the evolving business needs and future market growth, a technological revamp of the platform is necessary.
- CMG will replace OCG and be fully integrated with OTP-C to standardise technology stack for Hong Kong securities market. Benefits will include reduced complexity and better performance.
- CMG implementation will use a phased approach to allow a low impact transition for market participants:
 - Phase 1 (Q3 2021): technical migration with no functional changes
 - Phase 2 (Q1-Q2 2022): new functions and features to be introduced tentatively





02 - Benefits



Latency Improvement

 Robust new market access platform offering lower latency than existing OCG



Higher Performance

 Hardware will be refreshed with a new model to offer higher performance



Integrated Platform

 Fully integrated with OTP-C to provide greater flexibility to implement new functionalities in the future.





03 - Impact on EPs (Phase 1)

No Change to Functions, Throttling Mechanism, Capacity and Fees Structure

The implementation of CMG will not introduce any changes in terms of the functions provided, the throttling mechanism, the capacity per order flow session, and the fees structure. All the current OCG functions will be carried over to CMG.

Participation in Testing

- End-to-End (E2E) Test: All EPs should connect their systems to the CMG to verify the compatibility of their systems with CMG in a test environment analogous to the target production environment.
- Market Rehearsals (MRs): As the final preparation and verification of readiness before CMG migration, MRs will be conducted over a number of weekends after the completion of E2E test. All EPs are required to participate in the MRs to ensure their system readiness.

Migration to CMG is mandatory to all EPs. EPs should therefore plan ahead for the necessary testing effort in accordance with the CMG implementation schedule.



03 - Impact on EPs (Phase 2)

Introduction of New Features

EPs and Broker Supplied Systems (BSS) vendors are required to upgrade their BSS for accommodating some new features such as support for microsecond precision in timestamps.

Participation in Testing

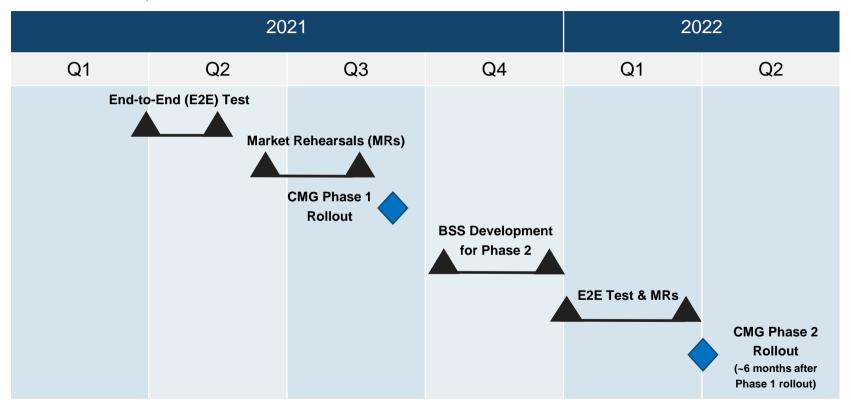
- End-to-End (E2E) Test: All EPs should connect their systems to the CMG to verify the compatibility of their system with the new features of CMG in an environment analogous to the target production environment
- Market Rehearsals (MRs): MRs will be conducted after the completion of E2E test. All EPs are required to participate
 in the MRs to ensure their system readiness for the new features.

Phase 2 details will be announced in due course when approaching Phase 1 completion.



04 - Implementation

The tentative implementation schedule of CMG is summarised as follows:





05 - Enquires

 For queries and further clarification on the Cash Market Gateway (CMG), please email OTPC@hkex.com.hk or write to:

Hong Kong Exchanges and Clearing Limited 6th Floor, Two Exchange Square 8 Connaught Place Central Hong Kong Re: Implementation of Cash Market Gateway (CMG)

- EPs and BSS vendors are welcomed to contact the HKEX BSS Support Team (BSSSupport@hkex.com.hk) for clarification on CMG Interface Specifications.
- For enquiries about OMD-C, please contact HKEX-IS (IVSupport@hkex.com.hk).
- For future project updates, please refer to <u>CMG project corner</u> at HKEX website



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