



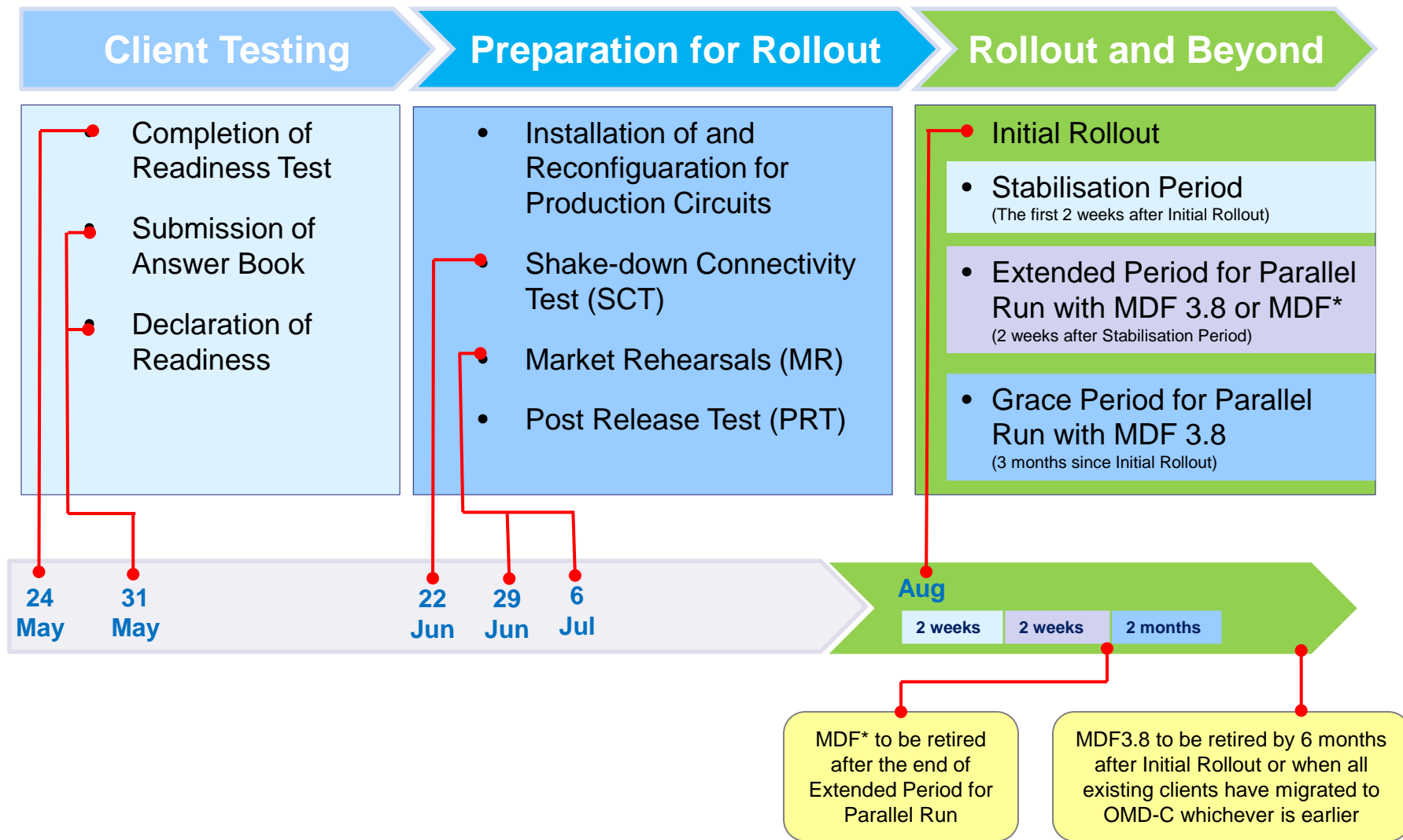
HKEx Orion Market Data Platform Securities Market & Index Feed (OMD-C) Briefing on Market Rehearsal

31 May 2013

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OMD-C Batch 1 Schedule Overview



OMD-C Market Rehearsal Overview



Test	Date	Test Area
Shakedown Connectivity Test	22 June 2013 (Full Day)	<ul style="list-style-type: none">• Final checking on HKEx system setup• Final checking on Clients' network setup
First Market Rehearsal	29 June 2013 (Half Day)	<ul style="list-style-type: none">• Normal data transmission in production environment• High data volume for performance/capacity test
Second Market Rehearsal	6 July 2013 (Full Day)	<ul style="list-style-type: none">• Failover to Disaster Recovery (DR) site• Fallback to MDF 3.8 / MDF*

Note:

All of the above test and market rehearsals are mandatory for all direct connection Batch 1 Clients. If a connection circuit set does not participate or fail in any of the above, it will not be enabled for Initial Rollout.

OMD-C Market Rehearsal

Shakedown Connectivity Test (SCT) – 22 June 2013



Client Actions

- ✓ Ensure all production equipment for OMD-C are in proper order
- ✓ Backup production databases as required
- ✓ Ensure proper network / application settings for connecting to the production OMD-C host (e.g. correct OMD-C host IP addresses and sufficient bandwidth)
- ✓ Assign staff to support HKEx and network carrier for unexpected incidents

- ✓ Listen to all entitled real-time channels from primary site and backup site
- ✓ Listen to all entitled refresh channels from primary site and backup site
- ✓ Request retransmission for all entitled real-time channels
- ✓ Failover to the backup site (DR site) upon HKEx announcement
- ✓ Ensure data integrity at the end of session

- ✓ Discard data received during the SCT
- ✓ Complete and return the Test Result Notification Form

- For Clients using existing HSN connections for OMD-C only
(i.e. same HSN ports are being used for other production systems)
- ✓ Participate in the HSN Connectivity Test
 - ✓ Ensure that the existing HSN connections to other production systems are normal and ready for the next trading day

Before SCT

During SCT

After SCT

Next Sunday Morning

OMD-C Market Rehearsal

1st Market Rehearsal (MR1) – 29 June 2013



Client Actions

- ✓ Ensure all production equipment for OMD-C are in proper order
- ✓ Backup production databases as required
- ✓ Ensure proper network / application settings for connecting to the production OMD-C host (e.g. correct OMD-C host IP addresses and sufficient bandwidth)
- ✓ Assign staff to support HKEx and network carrier for unexpected incidents

- ✓ Ensure smooth processing during normal data transmission
- ✓ Ensure no data loss during period of high data volume
- ✓ Ensure data integrity at the end of session
- ✓ Existing MDF 3.8 and MDF* Clients can reconcile data received from OMD-C with that from MDF 3.8 / MDF*

- ✓ Discard data received during the MR
- ✓ Complete and return the Test Result Notification Form

- For Clients using existing HSN connections for OMD-C only
(i.e. same HSN ports are being used for other production systems)
- ✓ Participate in the HSN Connectivity Test
 - ✓ Ensure that the existing HSN connections to other production systems are normal and ready for the next trading day

Before MR

During MR

After MR

Next Sunday Morning

OMD-C Market Rehearsal

2nd Market Rehearsal (MR2) – 6 July 2013



Client Actions

- ✓ Ensure all production equipment for OMD-C are in proper order
- ✓ Backup production databases as required
- ✓ Ensure proper network / application settings for connecting to the production OMD-C host (e.g. correct OMD-C host IP addresses and sufficient bandwidth)
- ✓ Assign staff to support HKEx and network carrier for unexpected incidents

- ✓ Rehearse internal operation procedures for OMD-C failover to DR site
- ✓ Rehearse internal operation procedure for fallback to MDF 3.8 or MDF* in emergency
- ✓ Ensure data integrity at the end of session
- ✓ Existing MDF 3.8 and MDF* Clients can reconcile data received from OMD-C with that from MDF 3.8 / MDF*

- ✓ Discard data received during the MR
- ✓ Complete and return the Test Result Notification Form where the lengths of time for completing the failover and the fallback processes should be provided

- For Clients using existing HSN connections for OMD-C only
(i.e. same HSN ports are being used for other production systems)
- ✓ Participate in the HSN Connectivity Test
 - ✓ Ensure that the existing HSN connections to other production systems are normal and ready for the next trading day

Before MR

During MR

After MR

Next Sunday Morning

OMD-C Market Rehearsal

- Pre-launch Confirmation by Clients



Clients are required to confirm the status below before joining the OMD-C rollout

Readiness Status		Implementation Plan
Direct Connection Clients	Feed Providing Vendors	Direct Connection Clients
<ul style="list-style-type: none"> <input type="checkbox"/> Applications (including feed handler, downstream and client applications) <input type="checkbox"/> Hardware <input type="checkbox"/> Network (internal and distribution network) 	<p><u>About indirect customers</u></p> <ul style="list-style-type: none"> <input type="checkbox"/> Choice of datafeed(s) <input type="checkbox"/> Completion of testing <input type="checkbox"/> Readiness for receiving OMD-C data <input type="checkbox"/> Fallback arrangement 	<ul style="list-style-type: none"> <input type="checkbox"/> Parallel run period with MDF 3.8 or MDF* <input type="checkbox"/> Commencement date of switching to OMD-C as the production data source

OMD-C Feed Enrollment

– *Feed Providing Vendors & Indirect Connection Vendors' Choice of Feed*



OMD-C Feed Enrollment for Indirect Connection Vendors

- HKEx has sent a notice to all Indirect Connection Vendors on 21 May 2013 (Our Ref: MDD/13/1060) to notify them the tentative choice of OMD-C feeds of Direct Connection Vendors and Indirect Connection Vendors are required to confirm with HKEx their choice of OMD-C datafeed by 7 June 2013 (Friday).
- Direct Connection Vendors who are feed providing vendors are encouraged to follow up with their feed receiving indirect connection clients the arrangement to migrate to OMD-C.

OMD-C Market Rehearsal

- Post Launch Arrangement



Post Launch Arrangement

Period	Duration	Measures	Parties Concerned
Stabilisation Period	First 2 weeks after Initial Rollout	<ul style="list-style-type: none"> Unnecessary and non-urgent changes to the OMD-C production circuits should be avoided 	All Batch 1 Clients
		<ul style="list-style-type: none"> Parallel run with current systems for receiving MDF 3.8 or MDF* data Rehearsed procedure for fallback to MDF 3.8 or MDF* in place 	Mandatory for all Batch 1 Clients with MDF 3.8 or MDF* connections
Extended Period for Parallel Run	Next 2 weeks after Stabilisation Period	<ul style="list-style-type: none"> Same MDF 3.8 / MDF* fallback capability as above 	<p>Mandatory for all Batch 1 Clients who are feed providing vendors</p> <p>Highly recommended for other Clients</p>
Grace Period for Parallel Run	First 3 months after Initial Rollout	<ul style="list-style-type: none"> Waiver on the Redistribution Fee and Connection Fee of MDF 3.8 so as to encourage Client to extend their parallel run period 	All Batch 1 Clients with MDF 3.8 connections

OMD-C Market Rehearsal

- Important Note



Participation in SCT, MR and PRT

- Full participation with all connection circuit sets.
- Sufficient resources to provide support to HKEx and network carrier to ensure successful completion
- Participation in the HSN Connectivity Test where applicable
- Fallback procedures to MDF 3.8 or MDF* well in place

Upon OMD-C Rollout

- Observe the requirements during the Stabilisation Period and the Extended Period for Parallel Run
- Closely monitor your OMD-C related services and inform HKEx immediately of any incident that may affect your dissemination of Hong Kong market data to customers

OMD-C Market Rehearsal

- Typhoon Arrangement



Condition	Event Time	Arrangement
Typhoon Signal No. 8 or above	Effective between 7:30am and 9:00am	Cancelled and not to be resumed for the rest of the day.
Black Rainstorm Warning	Effective between 7:30am and 9:00am	Cancelled and not to be resumed for the rest of the day.
Typhoon Signal No. 8 or above	Issued after 9:00am	Terminated 15 minutes thereafter.
Black Rainstorm Warning	Issued after 9:00am	Continue until completion.
All conditions		Clients should complete the appropriate day-end works to ensure there will not be interruption on the next trading day.

Questions and Answers

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