

The background image shows the Oslo Børs building, a neoclassical structure with a portico supported by columns. The word 'BØRSEN' is inscribed above the columns. A clock is visible in the pediment. In the foreground, there is a cobblestone courtyard with a central fountain and a statue. The scene is framed by trees with autumn foliage.

Oslo Optiq® Technical User Group

CONFORMANCE TESTING FOR THE OSLO OPTIQ MIGRATION



OSLO BØRS

SEPTEMBER 2020

AGENDA

1

Documentation Reminder

Johnny Makarainen
EMS Project Manager

- Technical Documentation

2

Conformance Tests

Johnny Makarainen
EMS Project Manager
Christian Ringstad
Secondary Markets

- Timeline
- Conformance Chart
- Conformance tests
(Functional Conformance >
High Availability > MDG
Validation > Front-to-back
> Throttling > Saturn)

3

Dress Rehearsals

Johnny Makarainen
EMS Project Manager

- Dress Rehearsals
- Requirements

4

Q&A

1. TECHNICAL DOCUMENTATION

1. Project page: <https://www.euronext.com/optiq>

2. Register at connect 2:



• <https://connect2.euronext.com/>

- Register for Euronext Info Flash
- Technical documentation
- Register for Euronext Operational Notices & Info-Flash

3. Stay updated via DELTA Announcements:



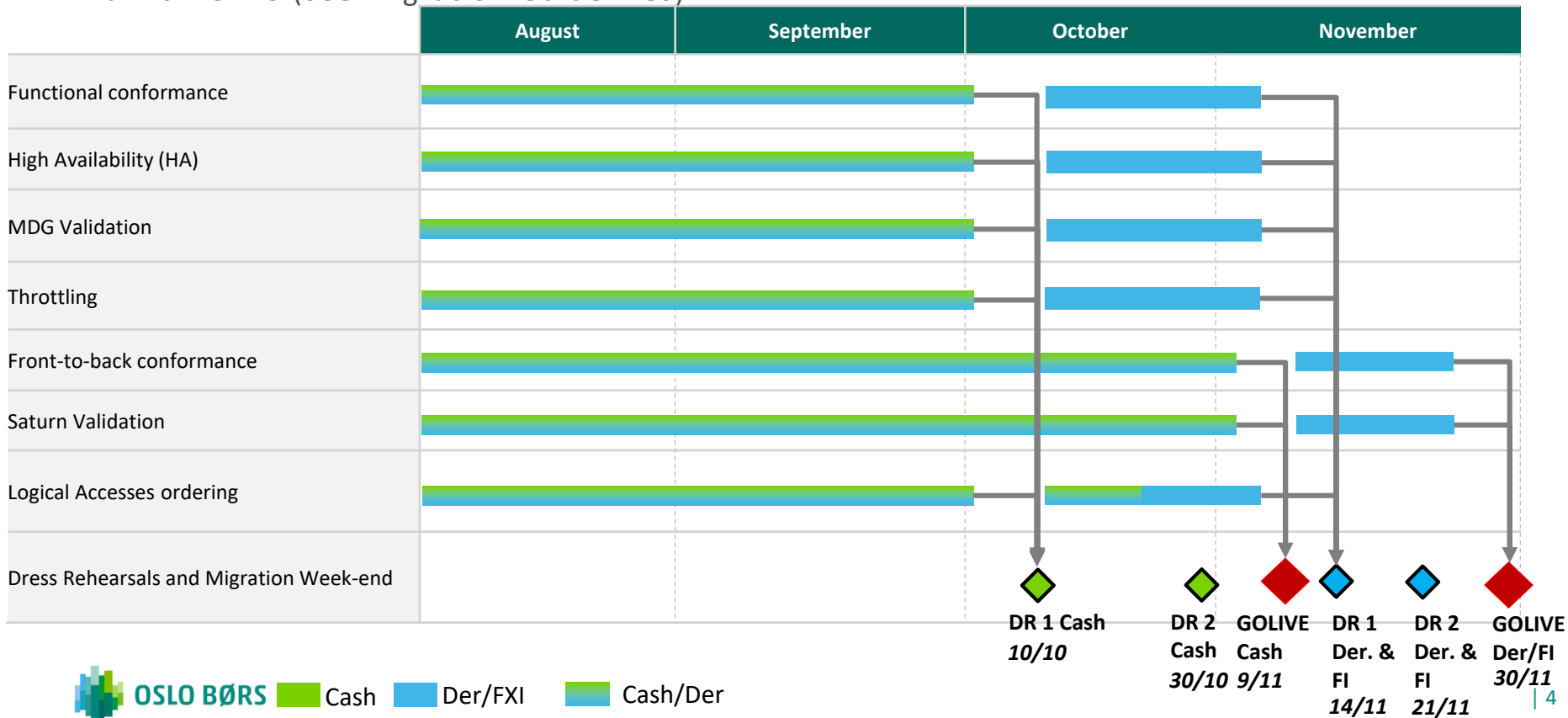
• <https://www.oslobors.no/Oslo-Boers/Handel/Delta/Optiq>

4. Support

- Osломigration@euronext.com

2.1 CONFORMANCE TIMELINE

Main timeline (see Migration Guidelines)

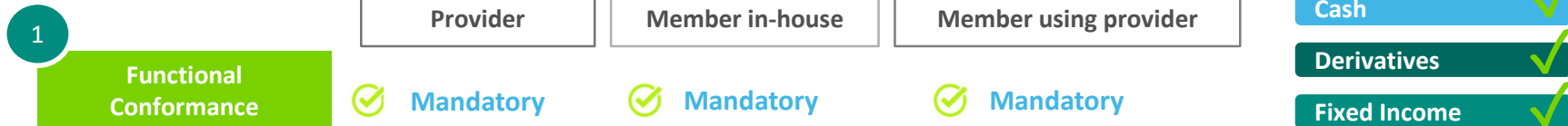


2. 2 CONFORMANCE CHART

	CASH	DERIVATIVES	FIXED INCOME
<i>To be booked with Euronext Team. Please contact oslomigration@euronext.com</i>	Functional Conformance	APPLICABLE	APPLICABLE (Cash)
	High Availability (HA)	APPLICABLE	APPLICABLE (Cash)
	MDG Validation	APPLICABLE	APPLICABLE
	Throttling	APPLICABLE	APPLICABLE (Cash)
	Front to Back conformance	APPLICABLE	<i>NOT APPLICABLE</i>
	Saturn Validation	APPLICABLE	APPLICABLE

Example:
A Cash and Fixed Income client could do one Functional Conformance on SBE302.

2. 3 FUNCTIONAL CONFORMANCE TEST



What

- Order Entry test to ensure the trading application is well set-up and can send and receive message without negative impact on Trading chain.
- To be completed for **all member codes** and **all solutions**
- **SBE**: Conformance on Cash must use minimum SBE v300, Derivatives v217, and Fixed Income v302.
- Cash deadline: 1st Dress Rehearsal. Derivatives & Fixed Income deadline: 1st Dress Rehearsal

Approach

- **Mandatory** for Cash, Derivatives, & Fixed Income for new members (in-house and member using provider) and software vendors not yet conformed on Optiq (OEG and MDG):
 - New Providers/Member in-house = Full Conformance *approx. 90 min*
 - New members using provider = Light Conformance *approx. 30 min*
 - **Mandatory** for member in-house and Software vendors already certified on Optiq:
 - Light Conformance *approx. 15 min*
- [Book conformance now with a Client Service Officer \(oslomigration@euronext.com\)](mailto:oslomigration@euronext.com)

2.3 HIGH AVAILABILITY

2

High Availability (HA)



Mandatory



Mandatory

Highly recommended

Cash



Derivatives



Fixed Income



What

- The High Availability test is to make sure the order entry software is capable of handling an HA / failover event and the kinematics.
- To be completed for **all trading solutions**.
- The Conformance Certificate requires **both completed Functional Conformance and High Availability**.
- **Cash**: Deadline before the 1st Dress Rehearsal
- **Derivatives & Fixed Income**: Deadline before the 1st Dress Rehearsal

Approach

- **Mandatory** for Cash, Derivatives & Fixed Income new member in-house and software vendors not yet conformed on Optiq
- The High Availability test is different depending on Single-partition or Multi-partition Optiq Segment. If a client intends to trade on a Multi-partition segment (Equities, Equity Derivatives, Index Derivatives, etc), then they must perform the Multi-partition test .
- Test HA within allocated time slots provided by Euronext (see Migration Guidelines for schedule)
- Provide test results in webform on Connect (see appendix)

2.3 MDG VALIDATION

3

MDG Validation



Mandatory



Mandatory

Member using provider

Highly recommended

Cash



Derivatives



Fixed Income



What

- The Market Data Gateway (MDG) Validation form validates that the member/provider understand and properly use the SBE template, various MDG messages, and concepts related to Market Data.
- **Cash:** Deadline one week before first Dress Rehearsal
- **Derivatives & Fixed Income:** Deadline one week before first Dress Rehearsal

Approach

- **Mandatory** for Cash, Derivatives & Fixed Income new member in-house, software vendors, and Data vendors not yet conformed on Optiq
- **Mandatory** for Trading members, Software providers, Data vendors already certified on Optiq (light version web form)
- Read documentation and test (follow High Availability schedule)
- Provide test results in webform on Connect (see appendix)

2. 3 THROTTLING

4

Throttling

Provider

Highly
recommended

Member in-house

Highly
recommended

Member using provider

Highly
recommended

Cash



Derivatives



Fixed Income



What

- This test is to ensure customers understand and can handle the Throttling mechanisms on Optiq. Customers can use either *Queuing* or *Rejection* in their logon message.
- **Cash:** Deadline before Go-live
- **Derivatives & Fixed Income:** Deadline before Go-live

Approach

- Throttling testing is a highly recommended tests for all new customers, especially new customers to Optiq.
- Clients can use the Throttling script to understand test cases (see appendix)
- Provide test results using a webform on Connect (see appendix)

2. 3 FRONT-TO-BACK

5

Front to Back
conformance



Mandatory



Mandatory

Highly
recommended

Cash



Derivatives



Fixed Income

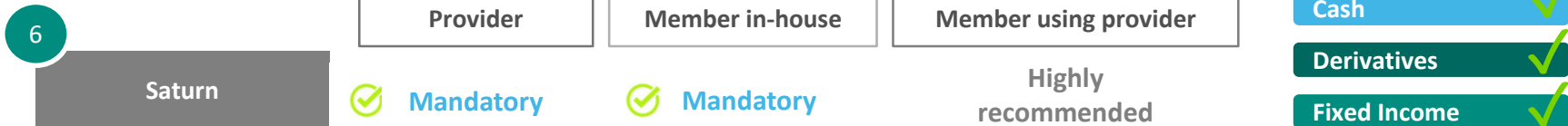
What

- Front-to-back is a test aimed at confirming that the mapping of fields and the associated configured values from Order Entry to posting in clearing accounts is correctly populated by the clients' trading facing systems, clearing members and back-offices.
- **Cash:** Deadline before Go-live
- **Derivatives:** Deadline before Go-live

Approach

- **Mandatory for all trading members.**
- Derivatives has a dedicated script and webform. For Cash there is only a webform.
- Once test is complete, submit the web form on Connect (see appendix)

2. 3 SATURN



What

- The Saturn solution contains many features, such as OBOE, SLC Manager, APA, etc.
- **SLC Manager is mandatory for all trading members**


Approach

- **Mandatory** for Cash, Derivatives & Fixed Income new member in-house and software vendors not yet conformed on Optiq
- There is one web form per migration for all Saturn Features.
- Each feature requires a file upload that is “Checked & Ready” and clients need to provide a reference id for each case to be validated.


3. 1 FOCUS ON DRESS REHEARSALS

- Two Dress Rehearsals for the Cash migration: **Saturday 10 October / 31 October;**
- Two Dress Rehearsals for the Derivatives / Fixed Income migration: **Saturday 14 November / 21 November;**
- **Participation in at least one Dress Rehearsal is mandatory** for all Trading Members;
- **Dress Rehearsal Guidelines** to be provided the Monday before each Dress Rehearsal.

WHAT YOU CAN DO

- 
- Log on / Log off
 - Inject orders
 - Receive market data messages
 - Purge the order book at the end of the day

WHAT YOU CANNOT DO

- 
- Front-to-Back testing
 - *Functional HA (TBC)*
 - *Saturn (TBC)*

3. 2 DRESS REHEARSAL REQUIREMENTS

IMPORTANT: Remember to have ordered PRODUCTION Market Data channels



3 requirements to participate in a Dress Rehearsal:

1. Passed the functional conformance test (+ High Availability)

- Booked and performed the Functional Conformance test and performed the High Availability test and submitted the HA webform => *Certificate*

2. Ordered Logical Access ID sessions for Production

- Requested Logical Access IDs for PRODUCTION via Connect portal one week before each Dress Rehearsal.

3. Tested the connectivity to Production (Telnet)

- Performed Telnet to the Production Order Entry Gateway ports (see document Euronext Markets - OEG Connectivity Telnet Tests)

ASK YOUR QUESTIONS

Johnny Makarainen

*EMS – Project
Manager*

Christian Ringstad

OB Secondary Market

Eve Goulvent

EMS – OCS

If there is not enough time to answer your questions, we will get back to you following the presentation. Thank you.



For any questions regarding the Oslo Migration, please contact

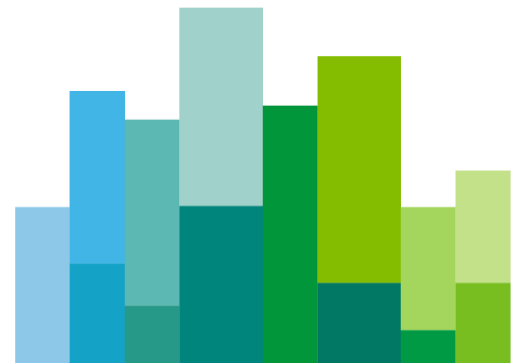
Oslomigration@euronext.com



APPENDIX



- Conformance Forms and Scripts



CONFORMANCE FORMS AND SCRIPTS

	CASH		DERIVATIVES		FIXED INCOME	
	Script	Form	Script	Form	Script	Form
Functional conformance	Script	Form	Script	Form	<i>(same as Cash)</i>	
High availability	Script	Mono-Partition HA SBE	Script	Mono-Partition HA SBE	<i>(same as Cash)</i>	
		Mono-Partition HA FIX		Mono-Partition HA FIX		
		Multi-Partition HA SBE		Multi-Partition HA SBE		
		Multi-Partition HA FIX		Multi-Partition HA FIX		
MDG Validation	-	New clients: Validation form Existing Euronext clients: Validation form	-	New clients: Validation form Existing Euronext clients: Validation form	-	Validation form
Throttling	Script	Validation form	Script	Validation form	<i>(same as Cash)</i>	
Front-to-back conformance	-	Validation form	Script	Validation form	N/A	
Saturn Validation	-	Validation form	-	Validation form	-	Validation form



Scripts and links can also be found in the [Migration Guidelines](#) (IT Documentation page)

THANK YOU!





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