

Document title

EURONEXT OPTIQ MARKET DATA GATEWAY (MDG) PHASE 1: CASH AND DERIVATIVES DRESS REHEARSAL TESTS

Document type or subject

OPTIQ MDG DRESS REHEARSAL 17 JUNE 2017 DETAILS

Revision number

Revision Number: 1.2

Date

13 June 2017

This document is for information purposes only. The information and materials contained in this document are provided 'as is' and Euronext does not warrant the accuracy, adequacy or completeness and expressly disclaims liability for any errors or omissions. This document is not intended to be, and shall not constitute in any way a binding or legal agreement, or impose any legal obligation on Euronext. This document and any contents thereof, as well as any prior or subsequent information exchanged with Euronext in relation to the subject matter of this presentation, are confidential and are for the sole attention of the intended recipient. Except as described below, all proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced without the prior written permission of Euronext. Portions of this presentation may contain materials or information copyrighted, trademarked or otherwise owned by a third party. No permission to use these third party materials should be inferred from this presentation.

Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at <https://www.euronext.com/terms-use>.

© 2017 Euronext N.V. - All rights reserved.

EXECUTIVE SUMMARY

Customers are invited to test the Optiq® Cash and Derivatives Market Data Gateway (MDG) at the Dress Rehearsal organised in the Production environment on Saturday 17 June 2017 between 11:00 CEST and 15:30 CEST.

Markets will close on the evening of Friday 16 June 2017 and open on Monday 19 June 2017 as usual, without taking the activity of Saturday 17 June 2017 into account. Customers are responsible for purging all market data and order entry data sent and received during any Saturday test.

PREFACE

PURPOSE

The purpose of this document is to provide customers with a detailed description of the Optiq MDG Dress Rehearsal weekend of 17 June 2017.

Other version of the document will be provided for 8 July Optiq MDG Dress Rehearsal weekend.

ASSOCIATED DOCUMENTS

This document should be read in conjunction with the following documents.

TITLE	DESCRIPTION
Optiq Euronext File Services User Guide	EFS user guide
Euronext Optiq™ Market Data Gateway Production Environment	Description of the Production feed configuration
Euronext Cash and Derivatives - File Specifications	Description of the files for Cash and Derivatives

DOCUMENT HISTORY

The following table provides a description of all changes to this document.

VERSION NO.	DATE	CHANGE DESCRIPTION
1.2	June 2017	PHASE 1: THIRD CASH AND SECOND DERIVATIVES DRESS REHEARSAL TESTS
1.1	June 2017	PHASE 1: SECOND CASH AND FIRST DERIVATIVES DRESS REHEARSAL TESTS
1.0	May 2016	PHASE 1: FIRST CASH DRESS REHEARSAL TESTS

SUPPORT

Please find below the Optiq Support Desk contact details, which has been established to ensure customer readiness by:

- sending information to customers related to Optiq
- answering customers' questions related to Optiq
- assisting customers in their testing and validation on the EUA environment
- providing follow-up on customer conformance testing
- assessing customers' state of readiness with regards to technical changes

Euronext Market Services Equities and Derivatives: Tel: +33 1 85 14 85 85 Email: optiq@euronext.com

Further Information

- For additional product information please visit: www.euronext.com/optiq
- For Optiq documentation please visit: www.euronext.com/optiq/en/documentation

CONTENTS

EXECUTIVE SUMMARY.....	2
PREFACE	3
PURPOSE	3
ASSOCIATED DOCUMENTS	3
DOCUMENT HISTORY.....	3
Support.....	3
1. SCOPE OF THE TEST	6
2. OUT OF SCOPE	7
3. CUSTOMER SUPPORT	8
4. MAIN PRINCIPLES OF THE TEST	9
4.1 IDENTIFIED ISSUES ON LAST DRESS REHEARSAL THAT ARE NOW ADRESSED	9
5. TRADING DATES DETAILS	10
5.1 PRE-REQUISITES FOR TAKING PART IN THE DRESS REHEARSAL	10
6. DRESS REHEARSAL TEST SCHEDULE.....	11
7. IMPORTANT REMINDERS	12
7.1 MDG Cash Pre-production period starting on 19 June	12
8. ROLL-BACK FOR CUSTOMERS' INTERNAL SYSTEMS.....	13
9. CONTACTS	14

1. SCOPE OF THE TEST

It is mandatory for customers to participate and successfully complete testing during the dress rehearsal.

Customers who complete the technical and functional testing successfully for Cash and Derivatives are not required to participate in another Dress Rehearsal.

Please find below details relevant to the Optiq Market Data Gateway (MDG) Cash and Derivatives Dress Rehearsal tests for Saturday 17 June 2017.

From 11:00 CEST until 15.30 CEST, customers are requested to:

- Test their connectivity to the MDG production channels for those that have not tested connectivity before the start of the dress rehearsals. We strongly recommend clients to test connectivity prior to the dress rehearsal.
- Log on through their order entry connections for Cash and Derivatives engines: Equities, Structured Products (Warrants, Certificates & Structured Notes), Trade Confirmation System (TCS), Options and Futures, Currency, Commodities.
- Check the market data broadcast via multicast by connecting their application/feed handler to:
 - XDP Cash and Derivatives - Real time, Refresh and Retransmission services
 - Optiq Cash and Derivatives Market Data services - Euronext File Services, Real time, Snapshot
- Provide the Optiq Service Desk with a confirmation of their final validation status through the following web forms:
 - [The Connectivity Status MDG Production Platform](#) (if not already filled in), and
 - The [MDG Dress Rehearsal form](#)

2. OUT OF SCOPE

- Web access for TCS Web.
- Post-trade systems: trades will not be integrated into the clearing system and no clearing members will be involved in this test.
- AtomX
- RiskGuard
- Settlement on Derivatives

3. CUSTOMER SUPPORT

Customer support is provided as follows:

- On Saturday 17 June, support will be available from the EMS and Optiq Support Desk from 11:00-16:00 CEST.
- Customers who experience issues during the Dress Rehearsal are invited to contact the Optiq Support Desk during the week following the dress rehearsal tests.

In the case of questions related to the tests, customers may contact the **Optiq Support Desk** ahead of the tests and during the Dress Rehearsal by email at optiq@euronext.com or **Euronext Market Services Support** by phone at +33 1 8514 8585.

- Real-time events will be posted on the Market Status website during the Dress Rehearsal validation at: www.euronext.com/market-status

4. MAIN PRINCIPLES OF THE TEST

Euronext will start a pre-opening trading session. Customers will be notified to connect to the platform via the [Market Status webpage](#).

Members should then be able to see Euronext Market Data in dual run:

- Euronext Cash and Derivatives Market Data going over the current Production system: XDP
- Euronext Cash and Derivatives Market Data going over the new Pre Production system: Optiq MDG : Step1

As soon as Euronext considers that Cash and Derivatives markets are ready to be fully operational, a continuous trading session will be set up on the Universal Trading Platform. Customers are invited to make sure that their internal systems and access means are correctly synchronised with Euronext central systems.

Euronext would like to make this test as realistic as possible in order to draw the most relevant and useful conclusions, and therefore encourages customers to participate actively by sending orders.

4.1 IDENTIFIED ISSUES ON LAST DRESS REHEARSAL THAT ARE NOW ADRESSED

- Sequence of start (referential before market update ,order update etc) will be respected for CASH and Derivatives products.
- Euronext File Services on Prod Internet: SSLv3 and TLSv1.0 and TLSv1.1 are available from Tuesday 13/06/2017. (Error Curl 35: SSL Error)
- Bourse De Luxembourg Indices :
 - o Present in BdL StandingDataFile
 - o Real-time message over Optiq MarketData messages
- Derivatives
 - o Decimal issue should not be different this time between XDP and Optiq

5. TRADING DATES DETAILS

The trading date used for the purposes of the test will be Saturday 17 June 2017. The order book situations will be those of Monday 19 June 2017 before the start of the pre-opening session, i.e. after the corporate events of the evening of Friday 16 June 2017.

Euronext invites members to enter orders as they do in the Production environment.

MDG Standing data files for Cash and Derivatives markets will be made available on Saturday 17 June 2017 with the business date of Monday 19 June 2017. Please make sure you do not have any security in place that would prevent to process them.

MDG standing data files for Derivatives will be different from the known production database with the particularities that:

- There will not be any strategies included
- There will not be any recent expiries included
- They will be based on Thursday 15 June evening state.

5.1 PRE-REQUISITES FOR TAKING PART IN THE DRESS REHEARSAL

1) Market data contract signed

Customers will be authorised to access Euronext production markets only if they have signed a Euronext Market Data agreement.

2) Connectivity to production confirmed

As of 29 April 2017, authorised customers can see “Start Of Day” messages going over Euronext production Optiq Market Data channel (as defined in the following document: [Connectivity test action plan Optiq Production V1.0](#)).

Customers must have a Euronext File Services (EFS) account to access the Pre-Production Optiq Euronext File Services. They can request their account by contacting Customer Access Services (CAS):

- Phone: +33 1 85 148 589
- Email: optiq@euronext.com

6. DRESS REHEARSAL TEST SCHEDULE

Note: All timings are approximate and are stated in CEST

Timeline	Action	Cash	Derivatives
11:00	<ul style="list-style-type: none"> Beginning of the test Participants are invited to check the status and timeline on the Market Status web page 	✓	✓
11:00	<ul style="list-style-type: none"> Cash and Derivatives customers start their systems and connect their applications to Euronext Production central systems Optiq Data Files (including Standing data) available on Production Euronext File Services (SFTI or Internet) Euronext Optiq MDG Cash and Derivatives Technical “Start Of Day” messages will be broadcasted over any MDG Production multicast channels 	✓ ✓ ✓	✓ ✓ ✓
11:15	<ul style="list-style-type: none"> Euronext XDP Cash and Derivatives Standing Data messages will be provided over relevant XDP Production multicast channels 	✓	✓
11:30	Euronext Optiq MDG Cash and Derivatives Standing Data messages will be provided over MDG Production multicast channels	✓	✓
12:00	<ul style="list-style-type: none"> Pre-opening phase (Call) in Production Customers can connect and send orders to the trading platforms 	✓ ✓	✓ ✓
12:15	<ul style="list-style-type: none"> Opening and Continuous Trading Session Customers can trade on all Cash and Derivatives trading engines (including TCS) 	✓ ✓	✓ ✓
15:30	<ul style="list-style-type: none"> End of customer test Customers can disconnect from Euronext central systems A Market Status message is sent confirming the end of the Dress Rehearsal 	✓ ✓	✓ ✓
Post 15:30	<ul style="list-style-type: none"> Customers confirm test status via The Connectivity Status MDG Production Platform (if not already filled in), and the MDG Dress Rehearsal status web form. 	✓	✓

7. IMPORTANT REMINDERS

During the test, Euronext will not be able to broadcast the Standing data messages over Optiq Market Data twice. Customers who have missed the broadcast of the referential data are requested to use the Optiq MDG Standing Data files available on the [EFS](#).

An additional dress rehearsal tests for Derivatives market only is scheduled for 8 July 2017.

7.1 MDG Cash Pre-production period starting on 19 June

The cash pre-production period will begin on **19 June 2017** conditioned to successful dress rehearsal :

During the cash pre-production, the MDG cash feed will be broadcasted but XDP will still be considered the primary Euronext market data feed. This period of pre-production allows clients to perform final tests on real production data. During this period, MDG service level is not yet at full production standards as only a secondary flow.

MDG Cash will then go shift to the primary market data feed on **26 June 2017**.

This will be followed by a dual run period with XDP Cash as secondary feed.

Please note that for issues in Production environment customers can contact “EMS Equities and EMS derivatives” and for technical on-boarding and development support customers can still contact “Optiq Support Desk”.

8. ROLL-BACK FOR CUSTOMERS' INTERNAL SYSTEMS

Upon completion of the Dress Rehearsal, members must restore/rollback their internal Production systems to the state of Friday 16 June 2017 evening after corporate events. It is very important that members do NOT synchronise their order book with data from Saturday 17 June 2017.

The Saturday 17 June 2017 session will not be taken into account in the Live/Production environment which will start on Monday 19 June 2017 as usual. Customers are requested to ensure their readiness for the next trading day's activities following any Saturday test.

Members are responsible for purging all market data and order entry data sent and received during any Saturday test.

9. CONTACTS

- On Saturday 17 June 2017, Euronext Market Services (EMS) Equities will manage the Pre-Production support of Market Data:
 - **Euronext Market Services Equities**
 - optiq@euronext.com
 - Tel: +33 1 85 14 85 85

or

- **Euronext Market Services Derivatives**
 - optiq@euronext.com
 - Tel: +31 20 721 9585;
-
- For any question(during the week) related to the test please contact:
 - **Optiq Support Desk**
 - optiq@euronext.com
 - Tel: +33 1 7048 2555
-
- For any question(during the week) related to EFS please contact
 - **Customer Access Services (CAS)**
 - Phone: +33 1 85 148 589
 - cas@euronext.com