

Document title

EURONEXT DUBLIN INTEGRATION: GO LIVE PREPARATION SESSION GUIDELINES FOR DUBLIN CASH MARKET SEGMENTS ON 2 FEBRUARY 2019

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EXECUTIVE SUMMARY

Customers are informed of the effective migration of Dublin Cash Market Segments from current systems to Euronext systems on Saturday 2 February 2019.

Target Production implementation of Order Entry Gateway (OEG), Market Data Gateway (MDG) and Saturn Trades Reporting will be made available to allow customers to check their set-ups and configuration in the Production environment on Saturday 2 February 2019 between **11:00** and **15:00** Central European Time (CET).

Customers authorized on Euronext Dublin market will be allowed to send orders on Dublin products. Customers with production configurations set-up ready and having performed Order Entry Conformance test, Market Data validation test, Off Book On Exchange validation test (when applicable) and having participated to at least one the two dress rehearsals will be allowed to connect on production environment on 2 February 2019 and consequently start activities on Monday 4 February 2019.

Markets will close on the evening of Friday 1 February 2019 on current systems and open on Monday 4 February 2019 on Euronext systems, without taking the activity of Saturday 2 February 2019 into account. Customers are responsible for purging all market data and order entry data sent and received during Saturday Go Live preparation session.

PREFACE

PURPOSE

The purpose of this document is to provide customers with a detailed description of the Euronext Optiq® and Saturn Migration Go Live preparation session on Saturday 2 February 2019.

ASSOCIATED DOCUMENTS

This document should be read in conjunction with the following documents. Please refer to the latest versions of the documents indicated, described as the future versions.

Euronext Dublin migration project

Euronext Dublin Migration Guidelines – version 1.5

Saturn Specifications and background documentation

- Euronext Global Reporting Solution Saturn Interface User Guide
- Saturn Web Services Specifications
- OBOE Euronext Off-Book On-Exchange trades publication Market Model overview
- Saturn example of OBOE upload file

Optiq® OEG Technical Documentation

- Euronext Cash Markets Optiq® OEG Client Specifications SBE Interface
- Euronext Cash Markets Optiq® OEG Client Specifications FIX 5.0 Interface
- Euronext Cash Markets Optiq[®] & TCS Error List
- Euronext Cash Markets Optiq® Kinematics Specification
- Euronext Cash Markets Optiq® Drop Copy Service
- Optiq Euronext File Services User Guide

MDG Technical Documentation

- Euronext Cash Market Optiq® MDG Client Specifications
- Euronext Cash and Derivatives Markets Optiq® File Specification
- Euronext Optiq[®] Market Data Gateway Production Environment
- Euronext Optiq® Market Data Gateway External User acceptance Environment

DOCUMENT HISTORY

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

VERSION NO.	DATE	CHANGE DESCRIPTION
1.0	23 January 2019	First Version of Go Live preparation session guidelines for Dublin integration on Euronext Optiq® Order Entry Gateway (OEG), Market Data Gateway (MDG) and Saturn Regulatory Reporting Solution

SUPPORT

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

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

Euronext Market Services Equities and Derivatives:

optiq@euronext.com

France: +33 1 8514 8585

The Netherlands: +31 20 721 9585

UK: +44 20 7660 8585
Belgium: +32 2 620 0585
Portugal: +351 2 1060 8585
Ireland: +353 1 6174289

For additional product information and further Dublin integration documentation, please visit: www.euronext.com/

CONTENTS

EXEC	CUTIVE SUMMARY	2
PREF	FACE	3
PURF	POSE	3
ASSC	OCIATED DOCUMENTS	3
	CUMENT HISTORY	
SUPP	PORT	4
1.	SCOPE OF THE GO LIVE PREPARATION SESSION	6
1.1	Migration scope	6
1.2	TEST OVERVIEW	6
1.3	ACCESS TO SERVICES & APPLICATIONS	6
1.4	DETAILS	6
2.	OUT OF SCOPE	8
3.	CUSTOMER SUPPORT	9
4.	MAIN PRINCIPLES OF THE GO LIVE PREPARATION SESSION	10
5.	TRADING DATES DETAILS	11
5.1	PRE-REQUISITES FOR Go Live preparation session	11
6.	GO LIVE PREPARATION SESSION SCHEDULE	12
7.	IMPORTANT REMINDERS	13
8.	ROLL-BACK FOR CUSTOMERS' INTERNAL SYSTEMS	14
9.	CONTACTS	

1. SCOPE OF THE GO LIVE PREPARATION SESSION

1.1 MIGRATION SCOPE

Scope of the migration is detailed in migration guidelines document available here, section 1.1 Scope of Dublin migration project.

1.2 TEST OVERVIEW

Customers are expected to conduct the following tests:

- Optional Connect to the Production environment (Order entry gateway and/or Market data gateway)
- **Optional** For any new connectivity, secure network resources on the day of the Dress Rehearsal to manage any firewall / security path
- Optional Perform functional tests on Euronext Dublin products fully supported on Saturn via API or GUI
- Mandatory Purge all production data received or sent during Saturday tests and restore production data to Friday night state

1.3 ACCESS TO SERVICES & APPLICATIONS

Euronext services and applications will be set up as follows for the Go Live Saturday session:

- Optiq Order Entry (OEG), including Drop Copy
- Market Data Gateway (MDG) for Equities and Funds Cash Market Segments, indices
- Saturn
- Euronext File Services (EFS)

1.4 DETAILS

Below please find details relevant to the Optiq Cash Order Entry (OEG), Market Data Gateway (MDG) and Saturn regulatory Reporting Solution Go Live preparation session for Equities and Funds Cash Segments on Saturday 2 February 2019.

Prerequisite

Client participants will be supported in connecting to the production environment using SBE template **version 105** for Equities and ETF segments, Market Data and Indices.

Note: this version of SBE template is the SBE template target to be used on the Go Live date of the 4th of February. Clients are reminded that OEG and MDG SBE Templates are backward and forward compatible and are recommended to connect to Optiq platform using SBE templates version 105 or greater to be fully compatible with CCP identifier functionality.

Between 11:00 and 15:00 CET, customers are invited, if they want to perform last set-ups and configuration checks, to:

- Connect to the Production environment:
 - Test and validate any new Optiq Order Entry logical connectivity on Cash market segment.
 - OEG connectivity for: Fixed Income, Equities, Funds, Structured Products (Warrants, Certificates and Structured Notes) and Luxembourg Stock Exchange.
 - Check the market data broadcast via multicast by connecting their application/feed handler to Real time and Snapshot.
 - Perform Market Data checks on MDG on new Euronext Dublin products (mainly Equities, Funds and Indices segments).
 - o Retrieve required files from Euronext Files Services (EFS).
- Perform functional tests:
 - Equities and Funds segments order through OEG on Dublin products.
 - Saturn trades publication through web interface (GUI)
 - Customers are invited to connect to Saturn GUI and submit trades by entering trades manually or uploading a CSV format trades file. Test scenario is described in appendix at the end of this document.
 - Customers can verify the publication of market data through the expected MDG channels.
- Purge all production data received or sent during Saturday tests and restore production data to Friday night state.
 - This applies to any orders or trades sent or received through the Saturn, through OEG for all segments and any internal data stored on the client side during the Go Live preparation session.

Between 15:00 and 17.00 CET, Euronext may conduct further internal tests. Customers are invited to ignore any data received after the Go Live preparation session.

Note: for the list of instruments and indices available on Go Live preparation session day, please refer to the last version of the Migration Guidelines, version 1.5, available here.

2. OUT OF SCOPE

The following services / markets are out of scope for Dublin market Go Live preparation session:

- Tests with EuroCCP
- End of day files
- Functional high availability
- Derivatives market
- TCS application

3. CUSTOMER SUPPORT

Customer support is provided as follows:

• On Saturday 2 February 2019, support will be provided by Euronext Market Services (EMS) and the Dublin integration Support Desk from 11:00 to 16:00 CET;

In the case of questions related to the Go Live preparation session, customers may contact the Euronext **Dublin integration Support Desk** ahead of the tests and during the Go Live preparation session by email at optiq@euronext.com or **EMS** by phone at +33 1 85 14 85 85.

 Real-time events will be posted on the Market Status website during the Go Live preparation session at: www.euronext.com/market-status

4. MAIN PRINCIPLES OF THE GO LIVE PREPARATION SESSION

Customers will be notified to connect to the platform via the Market Status webpage.

Upon confirmation of start of test customers should be able to see functional activities on Euronext Dublin products for:

- Market segment Equities.
- Market segment Funds.
- Indices.
- Saturn application.

The sequence for market opening is the following:

- Euronext will start a pre-opening trading session.
- As soon as Euronext considers that Equities and Funds Cash markets are ready to be fully operational, a continuous trading session will be set up on Optiq. Customers are invited to make sure that their internal systems and access means are correctly synchronised with Euronext Optiq.

5. TRADING DATES DETAILS

The trading dates used for the purposes of the Go Live preparation session will be **Saturday 2 February 2019**. The order book situations will be those of Monday 4 February 2019 before the start of the preopening session, i.e. after the corporate events of the evening of Friday 1 February 2019.

MDG Standing data files for Cash markets will be made available on Saturday 2 February 2019 with the business date of Monday 4 February 2019. Please make sure you do not have any security in place that would prevent to process them.

5.1 PRE-REQUISITES FOR GO LIVE PREPARATION SESSION

It is mandatory for any customer expected to onboard on the Dublin market on Euronext systems on the 4 February 2019:

- To have completed their Membership (including checking their clearing arrangements with their Clearing Member Firm),
- 2) To have ordered their OE Sessions and Logical Access for production and configured in Optiq system,
- 3) To have validated their OEG conformance test,
- 4) To have validated their MDG conformance test,
- 5) To have validated their Saturn OBOE conformance test (when applicable),
- 6) To have participated to at least one of the two dress rehearsals conducted on the 15 December 2018 and 19 January 2019.

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

Phone: +33 1 85 14 85 89Email: cas@euronext.com

6. GO LIVE PREPARATION SESSION SCHEDULE

Note: All timings are approximate and are stated in CET

Timeline	Action	Cash	
11:00	 Beginning of the Go Live preparation session Referential Files are made available on EFS. 	√	
11:30	 Participants can check the status and timeline on the Market Status web page Market Data: Optiq MDG Cash Technical "Start Of Day" messages should be broadcasted over Cash MDG Production multicast channels 		
12:00	 Euronext Optiq MDG Cash real-time Standing Data messages will be provided over MDG <u>Production multicast channels</u> Order Entry: Customers can connect their applications to the Euronext Production central systems: All Optiq Order Entry available via OEG No Order Entry available via CCG 	~	
12:15	 Start of pre-opening phase (Call) in Production for Fixed Income, Equities, Funds, Warrants and Certificates and Luxembourg Stock Exchange Segments. Customers can inject orders and perform trades on the Cash segments available. 	✓	
12:30	 Opening and Continuous Trading Session for the Cash segments available. Customers can inject orders and perform trades on the Cash segments available. Saturn application is ready. Customers can submit trades on the Cash segments available. 	✓ ✓	
15:00	 End of customer Go Live preparation session Customers can disconnect from Euronext central systems A Market Status message is sent confirming the end of the Go Live preparation session 	√ √ √	
16:00 to 17:00	Euronext may conduct internal tests.	√	

7. IMPORTANT REMINDERS

During the Go Live preparation session, Euronext will not be able to broadcast the real-time Cash Standing data messages over Optiq Market Data twice. Customers who have missed the broadcast of the referential data are requested to use the Optiq Cash Standing Data files made available on the EFS.

8. ROLL-BACK FOR CUSTOMERS' INTERNAL SYSTEMS

Upon participation to the Go Live preparation session, customers must restore/rollback their internal Production systems to the state of Friday 1 February 2019 evening after the end of the trading session. It is very important that customers do NOT synchronise their order book with the data from the <u>tests</u> they may have performed on Saturday 2 February 2019.

The Saturday 2 February 2019 Go Live preparation session will not be taken into account in the Live/Production environment which will start on Monday 4 February 2019 as usual.

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

9. CONTACTS

- On Saturday 2 February 2019, Euronext Market Services (EMS) Equities will manage the Pre-Production support of Market Data:
 - Euronext Market Services Equities
 - optiq@euronext.com
 - France: +33 1 8514 8585
 - The Netherlands: +31 20 721 9585
 - UK: +44 20 7660 8585
 Belgium: +32 2 620 0585
 Portugal: +351 2 1060 8585
 Ireland: : +353 1 6174289
- For any question(during the week) related to the test please contact:
 - Optiq Support Desk
 - optiq@euronext.com
 - Tel: +33 1 70 48 25 55
- For any question(during the week) related to EFS please contact:
 - Customer Access Services (CAS)
 - Tel: +33 1 85 14 85 89
 - cas@euronext.com