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**EURONEXT DERIVATIVES MARKETS – OPTIQ® RELEASE NOTE FOR EUA
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Detailed Information for the Opening of the End User Acceptance Test Platform of Optiq Trading Chain for the Derivatives Markets

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PREFACE

PURPOSE

This document describes the features and services, known limitations, as well as changes brought by the Optiq release. The content of the document is closely related to the “Euronext Derivatives – How the Market Works” document, which describes how Euronext Derivatives Markets are operated on Optiq.

ASSOCIATED DOCUMENTS

The following list identifies the associated documents, which either should be read in conjunction with this document, or which provide other relevant information for the users:

- Euronext Derivatives Markets – How The Market Works
- Euronext Markets – Optiq OEG Client Specifications – SBE Interface
- Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface
- Euronext Markets – Optiq MDG Client Specifications
- Euronext Derivatives Markets – Optiq Kinematics Specifications
- Euronext Markets – Optiq File Specification
- Euronext Markets – Optiq OEG Connectivity Specifications
- Euronext Markets – Optiq SBE Template Policy for the Migration of Derivatives Markets
- Optiq Technical Note SBE
- Euronext Optiq Phase 3: Derivatives Markets – OEG, ME and MDG Migration Guidelines

Clients are advised to also refer to the Euronext Rules and Regulations, trading procedure and annex documents for more details.

For the latest version of documentation please visit <http://www.euronext.com/optiq>

SUPPORT

Optiq Support Desk

For technical & functional assistance with the development and testing of Optiq, as well as for assistance with the use of the EUA environment, conformance, timeline and customer readiness checklist, clients should contact the Optiq Support Desk:

Tel: +33 1 70 48 25 55

Email: optiq@euronext.com

Customer Access Services

For support in obtaining access and connections to Euronext markets, Logical Accesses on Optiq (i.e. access and log-in credentials to Optiq OEG), clients should contract the Customer Access Services (CAS):

Tel: +33 1 85 14 85 89

Email: CAS@euronext.com

Operational Client Services

For any other client related questions clients should contact Operational Client Services (OCS):

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DOCUMENT REVISION HISTORY

For the details of this and previous updates of this document please refer to the [Appendix](#) at the end of this document.

| Version | Change Description |
|---------|--|
| 1.0 | Detailed information on the scope and services available with the roll out of the first software delivery of the Optiq trading chain for the Euronext Derivatives markets. Release: Opening of the End User Acceptance test platform. |

CONTENTS

| | | |
|------------|---|-----------|
| 1. | INTRODUCTION | 6 |
| 1.1 | Upgrade Purpose: Exchange Driven Change Description | 6 |
| 1.2 | How to read this document | 6 |
| 1.3 | Executive summary | 6 |
| 2. | ASSOCIATED RELEASE ELEMENTS | 10 |
| 2.1 | SBE Protocol | 10 |
| 2.2 | Load balacing | 10 |
| 3. | REFERENTIAL MANAGEMENT | 11 |
| 3.1 | Trading Instruments & Expiry Management..... | 11 |
| 4. | TRADING PATTERNS & TIMETABLES | 13 |
| 4.1 | Main Trading Phases | 13 |
| 4.2 | The Optiq Trading Patterns: predefined sequence of trading phases | 13 |
| 4.3 | Interruption of Trading | 14 |
| 5. | TRADING ON OPTIQ | 15 |
| 5.1 | Order Management Functionalities..... | 15 |
| 5.2 | Market Mechanisms & policies..... | 15 |
| 5.3 | Price Discovery for Outrights without Implieds..... | 16 |
| 5.4 | Continuous Trading for Outrights without Implieds..... | 16 |
| 5.5 | Trading on Strategies without Implieds | 16 |
| 5.6 | Implied Mechanisms: Event Driven Implied Matching (EDIM) Model..... | 17 |
| 5.7 | Implied Mechanisms: Spontaneous Implied Matching (SIM) Model..... | 17 |
| 5.8 | Optiq Tick Table Mechanism..... | 17 |
| 5.9 | Data Processing in Optiq..... | 18 |
| 6. | TRADING SAFEGUARDS | 19 |
| 6.1 | Dynamic Collar Reference Price Origin | 19 |
| 6.2 | Trading Safeguard management Model | 19 |
| 6.3 | Dynamic Collars for Strategies | 20 |
| 7. | AUTOMATED TRADE CONFIRMATION | 21 |
| 7.1 | Trade Price Validation (TPV) | 21 |
| 7.2 | Future Spike Protection (FSP) | 21 |
| 8. | TRADING FEATURES & SERVICES | 22 |
| 8.1 | Wholesales Faciltities..... | 22 |
| 8.2 | Request for Cross (RFC)..... | 22 |
| 8.3 | Total Return Futures (TRF) Service | 22 |
| 8.4 | Market on Close (MOC) Service | 22 |
| 9. | MARKET MAKING | 23 |
| 9.1 | Market Making Spread Obligation Framework..... | 23 |
| 9.2 | Market Maker Orders: Quotes..... | 23 |
| 9.3 | Market Maker Protection (MMP) | 24 |
| 10. | RISK MANAGEMENT SERVICES | 25 |
| 10.1 | Euronext RiskGuard | 25 |

10.2 Self-Trade Prevention (STP)25
10.3 Cancel on Disconnect25
10.4 Drop Copy25

1. INTRODUCTION

Euronext announced the launch of its new generation technology program in May 2016, which is delivering improved customer experience through the its new leading edge platform: Optiq®.

This document allows to follow the changes brought by the latest release of Optiq for Euronext Derivatives.

1.1 UPGRADE PURPOSE: EXCHANGE DRIVEN CHANGE DESCRIPTION

Optiq platform will be upgraded to its latest version in the context of the full migration of Derivatives markets on Optiq, including the Order Entry Gateway (OEG), Matching Engine (ME) and Market Data Gateway (MDG).

This upgrade is done specifically on the Derivatives Optiq segments: Equity Derivatives, Index Derivatives, Financial Derivatives, Commodities. Cash Optiq segments will not be modified with this upgrade.

This upgrade is done for the opening of the test platform to Euronext Derivatives Clients. As this is the first opening of the platform the test environment will be subject to finalization of configuration until 17 July 2019. While configuration finalization is ongoing, the platform will be available for clients to start their testing.

This document aims to describe all functionalities and their known limitations so that clients are aware of them, and additionally indicates which functionalities are subject to further configuration before on 17 July.

A second release note should be expected by clients by 17 July, to announce bug fixes, finalized configuration and opening of the software conformance test period.

1.2 HOW TO READ THIS DOCUMENT

This document describes the effective functional and operational elements through which the services described in “How the Market Works” are delivered on Optiq.

This document relies on the same structure as that of “How the Market Works” (HTMW) document.

Any known technical or functional limitations, caveats or outstanding defects of the delivered features are individually indicated in this document.

1.3 EXECUTIVE SUMMARY

The following table – in relation with the structure of this note, provides an overview of the release.

| Group of Services | Sub-Group of Services | Is the service managed in this version of Optiq? | # Related known issues |
|---|---|--|------------------------|
| 2. Associated Release Elements | SBE Templates | Delivered and available | 1 |
| 2. Associated Release Elements | Load Balancing of the Contracts | Delivered and available | 1 |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Delivered and available | 13 |
| 4. Trading Cycle: Patterns & Timetables | 4.1 Optiq Management of the Trading Cycle | Delivered and available | 1 |

| | | | |
|---|--|---|-----|
| 4. Trading Cycle: Patterns & Timetables | 4.2 Timetables files and messages | Delivered and available | 0 |
| 4. Trading Cycle: Patterns & Timetables | 4.3 Interruption of Trading services | Delivered and available | 0 |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Delivered and available | 13 |
| 5. Trading On Optiq | 5.2 Trading Policies | Price Explicit Time available (PET), <i>Price Pro Rata (PPR out of scope)</i> | 0 |
| 5. Trading On Optiq | 5.3 Price Discovery for Outright without Implied | Delivered and available | 0 |
| 5. Trading On Optiq | 5.4 Continuous Trading for Outrights without Implied | Delivered and available | 0 |
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Delivered and available | 5 |
| 5. Trading On Optiq | 5.6 Implied mechanisms: EDIM | Out of Scope | N/A |
| 5. Trading On Optiq | 5.7 Implied mechanisms: SIM | Out of Scope | N/A |
| 5. Trading On Optiq | 5.8 Optiq Ticktable Service (Referential and order validation) | Delivered and available | 0 |
| 6. Trading Safeguard | 6.1 Dynamic Collars Reference Price Origin Management (FV, FMP, OCP, Mid-BBO/FV) | Delivered and available | 1 |
| 6. Trading Safeguard | 6.2 Dynamic Collars Spread Management (AQS/Collars multipliers referential and collars size) | Delivered and available | 0 |
| 6. Trading Safeguard | 6.3 Dynamic Collars for Strategies | Delivered and available | 0 |
| 7. Automated Trade Confirmation | 7.1 Trade Price Validation | Delivered and available | 0 |
| 7. Automated Trade Confirmation | 7.2 Future Spike Protection | Out of Scope | N/A |
| 8. Trading Features and Services | 8.2 Wholesales Services | Delivered but NOT available | 1 |
| 8. Trading Features and Services | 8.2 Request For Cross | Out of Scope | N/A |
| 8. Trading Features and Services | 8.3 Market On Close | Out of Scope | N/A |
| 9. Market Making | 9.1 Market Making Spread Obligation Framework (Reference Spread File and inclusion in Optiq of the data) | Delivered and available | 0 |
| 9. Market Making | 9.2 Market Makers Orders | Delivered and available | 4 |
| 9. Market Making | 9.3 Market Maker Protection | Delivered and available | 4 |
| 10. Risk Management Services | 10.1 Euronext RiskGuard | Out of Scope | N/A |
| 10. Risk Management Services | 10.2 Self Trade Prevention | Out of Scope | N/A |
| 10. Risk Management Services | 10.3 Cancel on Disconnect | Delivered and available | 0 |
| 10. Risk Management Services | 10.4 Drop Copy | Out of Scope | N/A |

Summary of the known issues is provided in the table below :

| Scope Group of Function | Scope Sub-Group of function | Issue Description |
|--|---|--|
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Contract 'PRE' is missing timetable |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Unexpected values for Lot Size of the instruments |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Amount of Price Update - Indicative Matching Price - sent out at opening in MDG in large numbers |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Order rejected with 2032 error message 'Order entry disabled for this instrument' while OE is set at Yes |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | No Technical Notifications sent out at 3 am start of trading day |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | EFS in Standing Data Files wrong IP addresses in the LogicalAccessConnectivity |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Contracts missing in EFS Standing Data but visible in MDG real time messages |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Derivatives Standing Data - Field MMProtections in Derivatives Standing Data file is empty while it is a Mandatory field |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | AMR Code for Underlyings is showing 0 instead of space for Product Code |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Derivatives Standing Data file TradingUnit field is always filled with 1 |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Version number in file is not correct in Derivatives Standing Data File on EFS |
| 3. Trading Referential Management | 3.1 Trading Instruments & Expiry Management | Contract remains in referential after delisting |
| 4. Trading Cycle : Patterns & Timetables | 4.2 Timetables files and messages | EFS Timetable Files PhaseTime format issue |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | No Instrument Sync List (50) / FIX U50 messages sent |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | IMS is enabled on Derivatives. Fill (04) messages are marked as IMS and filled with counterparty |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | IOC & FOK are not accepted - validated against collars even when turned off (also impacting Market orders) |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Overnight orders are not sent with rebroadcast set to 1 |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Valid For Session orders are incorrectly enabled on Step 3 |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | FTI message with two empty fields and one with incorrect information |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | incorrect Ack Qualifiers value on Kill (05) messages following mass cancel request |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | incorrect Ack Qualifiers value sent on revision ack when there is an opposite order in the book |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Incorrect received Ack Qualifiers value: Cross partition is not taken into account |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | ClientIdentificationShortCode sent with incorrect value on Mass Cancel Ack (14) message |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Fill (04) message: LIS Transaction ID field incorrectly populated |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | Mass Cancel Ack (14): Maturity and Instrument Group Code fields badly populated |
| 5. Trading On Optiq | 5.1 Order Management Functionalities | OrderMassCancelReport (r) field MassActionReportID (tag 1369) is being sent with 0 |
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Halting an underlying leg suspends the Strategy, but Strategy remains suspended even after reopening leg |
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Strategy Trade: Incorrect leg pricing when there is BBO on the leg |
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Order entry on Strategy recreated next day are incorrectly rejected with reason Instrument has Expired |
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Negative price on Strategy market not checked against the tick |

| | | |
|----------------------------------|--|--|
| 5. Trading On Optiq | 5.5 Trading on Strategies without Implied | Day orders entered on strategy are not expired at the end of the day |
| 6. Trading Safeguard | 6.1 Dynamic Collars Reference Price Origin Management (FV, FMP, OCP, Mid-BBO/FV) | DCRP is not decimalized |
| 8. Trading Features and Services | 8.1 Wholesales Services | Parameters and checks of wholesale messages are preventing validation of pending submissions |
| 9. Market Making | 9.2 Market Makers Orders | “Trading” Logical Access can send MM Sign-in (47) and Quotes (08) messages |
| 9. Market Making | 9.2 Market Makers Orders | “Trading” Logical Access receives no response to submission of Quotes (08) messages, in place of rejection |
| 9. Market Making | 9.2 Market Makers Orders | An MM can send New Order with account type LP and Order Type Limit |
| 9. Market Making | 9.3 Market Maker Orders | OrderId set to 0 for some Rejected Quote Order |
| 9. Market Making | 9.2 Market Makers Orders | Quotes (08) messages entered on Future contract not rejected |
| 9. Market Making | 9.3 Market Maker Protection | MMP volume calculation at uncrossing wrong |
| 9. Market Making | 9.3 Market Maker Protection | Incorrect Error code 9999 when rejecting a MMP Request if you are not set up as MM |

2. ASSOCIATED RELEASE ELEMENTS

2.1 SBE PROTOCOL

The deployment of Optiq in EUA is accompanied with the upgrade of SBE version 201.

The SBE templates published with the OEG and MDG specification in April and May 2019 were version 200.

SBE templates version 201 are compatible with version 200. Clients can either chose to continue using version 200 or use version 201 to start their testing.

Note: previously published Notice [Euronext markets – Optiq SBE Template Policy for the Migration of Derivatives Markets](#) provides detailed approach to the SBE version management until the roll out of Derivatives Markets on Optiq on 25 November 2019.

The following describes the changes in SBE template version 201:

| Change | | MDG | OEG |
|-------------------------------------|--|-----|-----|
| Field 'Status Reason' | New Value: 24-Due To Leg | ✓ | |
| Field 'Contract Type' | New value: U – Underlying | ✓ | |
| Field 'Instrument State' | New Value: 18 – Reserved due to leg New Value: 19 – Suspended due to leg | ✓ | |
| Field 'Trade Type' | Guaranteed Cross Trade – Removed deprecated tag (re-activated value for the cash markets – future use) | ✓ | ✓ |
| Field 'Derivatives Instrument Type' | New Value: 4 – Underlying | ✓ | |
| Addition of 2 variable types: | char24 and char255 | ✓ | |

These changes will be reflected in the final delivery of specification in September 2019 which will rely on an SBE version 2XX > 201.

SBE templates are provided through EFS Service for each segment in their respective repositories as described below:

Files and Folders

| Folder | File Name |
|----------------------------------|--|
| / Commodities / Current | OptiqOEG_<ENVIRONMENT>_SBETemplate_Commodities_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_SBETemplate_Commodities_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqOEG_<ENVIRONMENT>_SBETemplate_EquityDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_SBETemplate_EquityDerivatives_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqOEG_<ENVIRONMENT>_SBETemplate_IndexDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_SBETemplate_IndexDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives / Current | OptiqOEG_<ENVIRONMENT>_SBETemplate_FinancialDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_SBETemplate_FinancialDerivatives_YYYYMMDD.xml |

2.2 LOAD BALACING

Clients should note that the contracts load balancing applied on the Equities segment of the test platform is not the target Production load balancing.

3. REFERENTIAL MANAGEMENT

3.1 TRADING INSTRUMENTS & EXPIRY MANAGEMENT

3.1.1 Release Details

Trading Instrument referential data is provided through ‘Derivatives Standing Data’ and ‘Open Interest’ files. Detailed specification of these files is available in the [Euronext Markets - Optiq File Specifications v3.0.1](#) document.

The files are accessible via both EFS Rest API and its Web Interface. Files are provided by Optiq Segment in their respective repositories as described below:

Files and Folders

| Folder | File Name |
|----------------------------------|--|
| / Commodities / Current | OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_Commodities_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_OpenInterestFile_Commodities_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_EquityDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_OpenInterestFile_EquityDerivatives_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_IndexDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_OpenInterestFile_IndexDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_FinancialDerivatives_YYYYMMDD.xml |
| | OptiqMDG_<ENVIRONMENT>_OpenInterestFile_FinancialDerivatives_YYYYMMDD.xml |

Standing Data (only) is also made available via the Market Data MDG feed through MD messages:

- Contract Standing Data (1012)
- Outright Standing Data (1014)

Clients should note that the data provided through the real-time MD messages contains the core trading data, while specific parameters for various facilities are provided only through files via a dedicated structure.

Example: RFC related parameters are available via the Standing Data files, and not within the core structure of the Contract referential data provided on both field and files. Parameters are provided with each functionality delivery when the functionality is turned on.

Changes in the referential data itself described in How the Market Works (e.g. changes to the AMR Code) are reflected in the content of both files and messages. Clients should refer to the related specifications for more details.

3.1.2 Service Limitations

The Service is fully delivered.

3.1.3 Known Defects

- ◆ Derivatives Standing Data - Field ‘MM Protections’ in Derivatives Standing Data file is empty while it is a Mandatory field and is of format Bitmap
- ◆ Contract ‘PRE’ is missing timetable

- ◆ Unexpected values for Lot Size of the instruments
- ◆ Amount of Price Update - Indicative Matching Price - sent out at opening in MDG in large numbers
- ◆ Order rejected with 2032 error message 'Order entry disabled for this instrument' while OE is set at Yes
- ◆ No Technical Notifications sent out at 3 am start of trading day
- ◆ EFS Standing Data Files wrong IP addresses in the LogicalAccessConnectivity
- ◆ Contracts missing in EFS Standing Data but visible in real-time
- ◆ AMR Code for Underlyings is showing 0 instead of space for Product Code
- ◆ Derivatives Standing Data file TradingUnit field is always filled with 1
- ◆ Version number in file is not correct in Derivatives Standing Data File on EFS

4. TRADING PATTERNS & TIMETABLES

4.1 MAIN TRADING PHASES

All trading phases and states, with their respective rule, are supported by this release of Optiq:

- Call (Price Discovery),
- Continuous (Open Trading),
- Uncrossing,
- Reserved, Suspended, Halt (Interruption of Trading).

These phases and states are triggered via the timetable mechanism and trading interruption cases described in the [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

The structure of the associated Market Status Change (1005) message is described in the [Euronext Markets - Optiq MDG Client Specifications v3.0.1](#) document.

4.2 THE OPTIQ TRADING PATTERNS: PREDEFINED SEQUENCE OF TRADING PHASES

Timetables are provided via referential data files and messages. The file description is provided in the [Euronext Markets - Optiq File Specifications v3.0.1 specification](#) document.

Timetable files are available on EFS, and the list of folders and associated files is provided below:

Files and Folders

| Folder | File Name |
|----------------------------------|--|
| / Commodities / Current | OptiqMDG_<ENVIRONMENT>_TimeTableFile_Commodities_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqMDG_<ENVIRONMENT>_TimeTableFile_EquityDerivatives_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqMDG_<ENVIRONMENT>_TimeTableFile_IndexDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives / Current | OptiqMDG_<ENVIRONMENT>_TimeTableFile_FinancialDerivatives_YYYYMMDD.xml |

The Timetable ID is provided as the reference in Contract referential data on an EMM basis, allowing clients to identify for each Contract which timetable is used by the Matching Engine (ME) for the individual market mechanisms (i.e. COB, Wholesales, RFC).

Timetables are also available through messages on the Market Data Feed. The timetables are sent via the real-time market data **Timetable** (1003) message described in the [Euronext Markets - Optiq MDG Client Specifications v3.0.1](#) document. Sending rules of the message are detailed in the specification document and illustrated in the [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

4.2.1 Service limitations

The service is fully delivered in this version of Optiq.

4.2.2 Known Defects

- ◆ For the field 'Phase Time' – data is provided in ms, and in incorrect format

4.3 INTERRUPTION OF TRADING

States for Interruption of Trading (Reservation, Halt, Suspension) are available to be triggered according to Euronext Rulebook and Trading Procedures by the Euronext Market Services.

4.3.1 Service limitations

The service is fully delivered in this version of Optiq.

4.3.2 Known Defects

No known defects are reported for the service as delivered.

5. TRADING ON OPTIQ

5.1 ORDER MANAGEMENT FUNCTIONALITIES

Order types and Time in Force functionalities for order submission, supported by Optiq as described in How the Market Works, are fully delivered in this version of Optiq.

The associated structure of messages is described in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) and [Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface v2.0.0](#) documents. Associated dynamic interactions with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

5.1.1 Service limitations

The service is fully delivered in this version of Optiq.

5.1.2 Known Defects

- ◆ No Instrument Sync List (50) / FIX (U50) messages sent
- ◆ IMS is enabled on Derivatives. Fill (04) messages are marked as IMS and filled with counterparty
- ◆ IOC & FOK are not accepted - validated against collars even when turned off (also impacting Market orders)
- ◆ Orders overnight are not sent with rebroadcast set to 1
- ◆ Valid For Session orders are incorrectly enabled on Step 3
- ◆ Incorrect FTI message with two empty fields and one with incorrect info
- ◆ Incorrect Ack Qualifiers value on Kill (05) message following mass cancel request
- ◆ Incorrect Ack Qualifiers value sent on revision ack when there is an opposite order in the book
- ◆ Incorrect received Ack Qualifiers value: Cross partition is not taken into account
- ◆ *ClientIdentificationShortCode* sent with incorrect value on Mass Cancel Ack (14) message
- ◆ Fill (04) message: field *LIS Transaction ID* is incorrectly populated
- ◆ Mass Cancel Ack (14): *Maturity* and *Instrument Group Code* badly populated
- ◆ FIX: in message *OrderMassCancelReport* (r) field *MassActionReportID* (tag: 1369) is being sent with 0
- ◆ *OrderId* field set to 0 for some Rejected Quote Order

5.2 MARKET MECHANISMS & POLICIES

- Both expected market mechanisms (Price Discovery and Continuous trading) are available for trading as described in How the Market Works document.
- Price Explicit Time (PET) matching policy is available for trading.

5.2.1 Service limitations

Price Pro-Rata (PPR) matching policy is not supported in this version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

5.2.2 Known Defects

No known defects are reported for the service delivered.

5.3 PRICE DISCOVERY FOR OUTRIGHTS WITHOUT IMPLIEDS

The Uncrossing mechanism is delivered as described in How the Market Works. Associated detailed interactions with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

5.3.1 Service limitations

The service is fully delivered in this version of Optiq.

5.3.2 Known Defects

No known defects are reported for the service as delivered.

5.4 CONTINUOUS TRADING FOR OUTRIGHTS WITHOUT IMPLIEDS

The service is fully delivered, with PET matching policy supported. As such all contracts are set with PET as a matching policy parameter.

5.4.1 Service limitations

Price Pro-Rata (PPR) policy will be supported in a later delivery, as such no contract can be assigned the PPR policy. It will be made available with the second functional release of Optiq in EUA in October.

5.4.2 Known Defects

No known defects are reported on the service as delivered.

5.5 TRADING ON STRATEGIES WITHOUT IMPLIEDS

Trading on Strategies without implied as described in How the Market Works document, is supported by this version of Optiq.

Detailed interaction with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

Structure of the messages, including the way to create strategies by Euronext clients, are described in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) and [Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface v2.0.0](#) documents.

5.5.1 Service limitations

The service is fully delivered in this version of Optiq.

5.5.2 Known Defects

- ◆ Reader should be aware that the reported defects on standard order management functionalities are also applicable to strategy order books (cf. section 5.1.2)
- ◆ Halting an underlying leg suspends the Strategy, but Strategy remains suspended even after reopening leg
- ◆ Strategy Trade: Incorrect leg pricing when there is BBO on the leg
- ◆ Order entry on Strategy recreated next day are incorrectly rejected with reason Instrument has Expired
- ◆ Negative price on Strategy market not checked against the tick
- ◆ Day orders entered on strategy are not expired by the ME at the end of the day

5.6 IMPLIED MECHANISMS: EVENT DRIVEN IMPLIED MATCHING (EDIM) MODEL

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

5.7 IMPLIED MECHANISMS: SPONTANEOUS IMPLIED MATCHING (SIM) MODEL

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

5.8 OPTIQ TICK TABLE MECHANISM

The Ticktable service is fully delivered in this version of Optiq, as described in How the Market Works.

Structure of the file is described in [Euronext Markets - Optiq File Specifications v3.0.1 specification](#) document.

Tick tables files are available for clients on EFS within their repositories as described below:

Files and Folders

| Folder | File Name |
|----------------------------------|---|
| / Commodities / Current | OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeReferenitalFile_Commodities_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeReferenitalFile_EquityDerivatives_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeReferenitalFile_IndexDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeReferenitalFile_FinancialDerivatives_YYYYMMDD.xml |

The rules of order acceptance according to the tick managed by Optiq are the ones described in How the Market Works. Ticks are not checked for matching.

5.8.1 Service limitations

The service is fully delivered in this version of Optiq.

5.8.2 Known Defects

- ◆ Negative price on Strategy market not checked against the tick.

5.9 DATA PROCESSING IN OPTIQ

The sequence in Market Data fits the logic for outrights described in How the Market Works.

The detailed interactions with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

5.9.1 Service limitations

The service is fully delivered in this version of Optiq.

5.9.2 Known Defects

- ◆ While the processing has no known defects, some field population issues are highlighted in section 5.1.2 of this document.

6. TRADING SAFEGUARDS

6.1 DYNAMIC COLLAR REFERENCE PRICE ORIGIN

Dynamic Collar logic is provided on a daily basis through referential data at contract level, through two Reference Spread fields – respectively for Call and Continuous phases. The fields are available in referential standing data to indicate to clients, which policy applies on which contract for which phase type.

The dynamic collars logic is taken into account by Optiq to build the DCRP according to the rules explained in How the Market Works.

6.1.1 Service limitations

The Pricing System feeding Optiq with the Fair Value configuration remains to be finalized for the fair value policies to be effective on the test environment.

6.1.2 Known Defects

- ◆ DCRP is not decimalized

6.2 TRADING SAFEGUARD MANAGEMENT MODEL

Optiq supports all notion in relation with AQS, MQS and collars. Data is provided in the Reference Spreads file described in [Euronext Markets - Optiq File Specifications v3.0.1 specification](#) document.

The reference spread tables are provided to members through the dedicated referential as follows:

Files and Folders

| Folder | File Name |
|------------------------------------|--|
| / Commodities / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_Commodities_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_IndexDerivatives_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_EquityDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives/ Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_FinancialDerivatives_YYYYMMDD.xml |

Collars are computed according to the Reference Spread (APF) tables (as a multiplier of MSQ) and are set around the DCRP calculated as described in How the Market Works.

6.2.1 Service limitations

The Service is fully delivered.

6.2.2 Known Defects

No known defects are reported for the service as delivered.

6.3 DYNAMIC COLLARS FOR STRATEGIES

The service is delivered according to the rules described in the associated section of how the market works.

6.3.1 Service limitations

The Service is fully delivered.

6.3.2 Known Defects

No known defects are reported for the service as delivered.

7. AUTOMATED TRADE CONFIRMATION

7.1 TRADE PRICE VALIDATION (TPV)

The service is delivered as described in How the Market Works.

Detailed interactions with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

Structure of the messages are described in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) document.

7.1.1 Service limitations

The Service is fully delivered.

7.1.2 Known Defects

No known Defects reported on the Service.

7.2 FUTURE SPIKE PROTECTION (FSP)

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

8. TRADING FEATURES & SERVICES

8.1 WHOLESALS FACILITIES

The Wholesale facility is delivered in this version of Optiq, as described in How the Market Works.

Detailed structure of the involved dedicated messages is provided in in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) and [Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface v2.0.0](#) documents.

Associated interaction with Optiq are described in details in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

8.1.1 Service limitations

Configuration of wholesales facility remains to be finalized to be effective on the test environment. Due to this any submissions of new wholesales order received by Optiq will be rejected with error code 1149 (Unknown Message)

8.1.2 Known Defects

- ◆ Parameters and checks of wholesale messages are preventing validation of pending submissions. Until configuration of wholesale parameters is completed submission of wholesales orders by Optiq will be rejected.
-

8.2 REQUEST FOR CROSS (RFC)

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

8.3 TOTAL RETURN FUTURES (TRF) SERVICE

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

8.4 MARKET ON CLOSE (MOC) SERVICE

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

9. MARKET MAKING

9.1 MARKET MAKING SPREAD OBLIGATION FRAMEWORK

The service is delivered as described in How the Market Works.

Data is provided in the Reference Spreads file described in [Euronext Markets - Optiq File Specifications v3.0.1 specification](#)

The tables are provided to members through the dedicated referential as follows:

Files and Folders

| Folder | File Name |
|----------------------------------|--|
| / Commodities / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_Commodities_YYYYMMDD.xml |
| / IndexDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_IndexDerivatives_YYYYMMDD.xml |
| / EquityDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_EquityDerivatives_YYYYMMDD.xml |
| / FinancialDerivatives / Current | OptiqMDG_<ENVIRONMENT>_DerivativesReferenceSpreadsTables_FinancialDerivatives_YYYYMMDD.xml |

9.1.1 Service limitations

The Service is fully delivered.

9.1.2 Known Defects

No known defects are reported for the service as delivered.

9.2 MARKET MAKER ORDERS: QUOTES

Optiq access model manages the three types of functional access roles defined at Logical Access level. The Quotes messages are available for the Logical Accesses with functional role of Market Making. The Quotes functionality is managed by Optiq and is available for trading.

The processing rules of Market Making, including the Quotes message and MM sign-in, follow the logic described in How the Market Works.

Detailed interaction of Quotes and MM Sign-in messages in Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

Structure of the messages are described in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) document.

9.2.1 Service limitations

The Service is fully delivered.

9.2.2 Known Defects

- ◆ “Trading” Logical Access can send MM Sign-in (47) and Quotes (08) messages

- ◆ “Trading” Logical Access receives no response to submission of Quotes (08) messages, in place of rejection
- ◆ An MM can send New Order with account type LP and Order Type Limit
- ◆ OrderId set to 0 for some Rejected Quote Order
- ◆ Quote orders entered on Future contract not rejected

9.3 MARKET MAKER PROTECTION (MMP)

The service is delivered as described in How the Market Works.

Detailed interactions with Optiq are described in [Euronext Derivatives Markets – Optiq Kinematics Specifications - v1.0.1](#) document.

Structure of the messages are described in [Euronext Markets – Optiq OEG Client Specifications – SBE Interface v2.0.0](#) document.

9.3.1 Service limitations

The Service is fully delivered.

9.3.2 Known Defects

- ◆ MMP volume calculation at uncrossing wrong
- ◆ Incorrect Error code 9999 when rejecting a MMP Request if a client is not set up as an MM

10. RISK MANAGEMENT SERVICES

10.1 EURONEXT RISKGUARD

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

10.2 SELF-TRADE PREVENTION (STP)

The service will be supported in a future version of Optiq. It will be made available with the second functional release of Optiq in EUA in October.

10.3 CANCEL ON DISCONNECT

The service is delivered as described in How the Market Works.

Detailed interaction with Optiq and in depth details about Cancel on Disconnect mechanism are provided in the dedicated section of the [Euronext Markets – Optiq OEG Connectivity Specifications v2.1.0](#) document.

10.3.1 Service limitations

The service is fully delivered in this version of Optiq.

10.3.2 Known Defects

No known defects are reported for the service as delivered.

10.4 DROP COPY

While supported by this version of Optiq, the service will not be available on 26 June 2019.

The service is subject to further infrastructure and system configuration, before being available to clients.

A first delivery with Cash-like scope is planned to be delivered in July.

This service will be made available with prior Notice to clients without requiring an Optiq upgrade.

This release note will be updated accordingly and republished in due course.

10.4.1 Service limitations

The service is not fully configured, and dedicated infrastructure remains to be adjusted for the service to be available.

Drop Copy IP addresses provided in Standing Data file dedicated connectivity section must be considered as obsolete by Clients. The expected connectivity information for the Drop Copy is provided in the [Euronext Markets – Optiq OEG Connectivity Specifications v2.1.0](#) document.

As a reminder, description of the referential standing data file, which includes the connectivity data, is available in the [Euronext Markets - Optiq File Specifications v3.0.1 specification](#) document.

10.4.2 Known Defects

While not technically started on the test environment, no known defects are reported for the service as delivered.

APPENDIX A: REVISION HISTORY

SUMMARY OF CHANGES

| Version | Change Description |
|---------|---|
| 1.0 | Detailed information on the scope and services available with the roll out of the first software delivery of the Optiq trading chain for the Euronext Derivatives markets Release: Opening of the End User Acceptance test platform. |

DOCUMENT HISTORY

| REVISION NO. | DATE | AUTHOR | CHANGE DESCRIPTION |
|--------------|--------------|----------|--|
| 1.0 | 26 June 2019 | Euronext | Roll out of the first software delivery of the Optiq trading chain for the Euronext Derivatives markets, with conformance scope. |