

Document title

**EURONEXT DERIVATIVES MARKETS – OPTIQ® RELEASE NOTE FOR  
MIGRATION IN PRODUCTION**

Document type or subject

Detailed Information for delivery of services and facilities on Optiq for Derivatives Markets

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## PREFACE

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### 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.

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### 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>

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### 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](mailto: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](mailto:CAS@euronext.com)

**Operational Client Services**

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

Email: [clientsupport@euronext.com](mailto:clientsupport@euronext.com)

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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
1.4	Optiq Go-Live

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## 1. INTRODUCTION

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

Euronext Derivatives markets are live on Optiq starting the 25<sup>th</sup> of November, 2019.

This document aims to describe to customers the last known issues on Exchange side impacting them, that were accepted as non-blocking for the migration.

### 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.

### 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

#### 1.3.1 Known Issues overview by Service

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?	# known issues
2. Associated Release Elements	SBE Templates	Delivered and available	0
2. Associated Release Elements	Load Balancing of the Contracts	Delivered and available	0
3. Trading Referential Management	3.1 Trading Instruments & Expiry Management	Delivered and available	2
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	5

5. Trading On Optiq	5.2 Trading Policies	Price Explicit Time (PET), Price Pro Rata (PPR) <i>activated on 30<sup>th</sup></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	0
5. Trading On Optiq	5.6 Implied mechanisms: EDIM	Delivered and available	0
5. Trading On Optiq	5.7 Implied mechanisms: SIM	Delivered and available	0
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	0
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	Delivered and available	0
8. Trading Features and Services	8.1 Wholesales Services	Delivered and available	3
8. Trading Features and Services	8.2 Request For Cross	Delivered and available	3
8. Trading Features and Services	8.3 Market On Close	Out of Scope	
8. Trading Features and Services	Total Return Futures	Delivered and available	3
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	3
9. Market Making	9.3 Market Maker Protection	Delivered and available	0
10. Risk Management Services	10.1 Euronext RiskGuard/kill	Delivered but not ERG available	0
10. Risk Management Services	10.2 Self Trade Prevention	Delivered and available	0
10. Risk Management Services	10.3 Cancel on Disconnect	Delivered and available	1
10. Risk Management Services	10.4 Drop Copy	Delivered and available	0

### 1.3.2 Resolved Known Issues overview versus previous Release Note

Most known issues published in the previous Release Note have been fixed. Comparing current known issues with the previous Release Note is no longer relevant.

### 1.3.3 Know Issues detailed overview

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	Derivatives Standing Data File Equity Derivatives   Strike Price filled in with 0 value for a dividend future
3. Trading Referential Management	3.1 Trading Instruments & Expiry Management	End of Day created strikes sent out next day before Standing Data and Start of Trading Day data, should be after
4. Trading Cycle: Patterns & Timetables	4.1 Optiq Management of the Trading Cycle	Commodity Options are shown as ‘Suspended by MO’ at start of day
5. Trading On Optiq	5.1 Order Management Functionalities	MarketUpdate (1001) message – Incorrect NULL volume on RFQ
5. Trading On Optiq	5.1 Order Management Functionalities	MMT Trading Mode for Uncrossing Trades is shown as Continuous
5. Trading On Optiq	5.1 Order Management Functionalities	Price Update Event time badly populated, Clients must rely on Packet Time until fixed
5. Trading On Optiq	5.1 Order Management Functionalities	Clearing Firm ID field allows forbidden chars to be submitted
5. Trading On Optiq	5.5 Trading on Strategies without implied	Sequence in Strategy trade publication is not followed in 1004 trades publication as compared to 1001
8. Trading Features and Services	8.1 Wholesales Facility	Bookstate Uncrossing is incorrectly sent out for EMM=4 - Derivatives Wholesale
8. Trading Features and Services	8.1 Wholesales Facility	In case of LiS Package Trade or Cancellation of this trade, MMT Transaction Category not populated with TPAC
8. Trading Features and Services	8.1 Wholesales Facility	In case of Trade Cancellation of LiS (Package) Trade, unexpected 1001 messages are sent for trade cancellation
8. Trading Features and Services	8.2 Request For Cross	No Statistics message sent after RFC Trade
8. Trading Features and Services	8.2 Request For Cross	Cancellation of a Reaction is not allowed - rejected
8. Trading Features and Services	8.2 Request For Cross	In case a reaction does not match, trade with Quantity 0 is published instead of Kill of the reaction. No impact on clearing or fees (lots traded = 0)
8. Trading Features and Services	8.4 Total Return Future	Upon intraday HA event, provisional prices of TRF are recalculated based on the level of Index at HA event
8. Trading Features and Services	8.4 Total Return Future	Market Update tag 65 provided in case of LiS on TRF – TAM, has a wrongly calculated price. Resulting Price Update – Provisional Price sent following this trade has a wrong Price. Price of the trade itself is OK, from trading to clearing.



8. Trading Features and Services	8.4 Total Return Future	In case of TRF Trade Cancellation in BAPO, the Trade Cancel message MiFID Price notation field is populated in MONEY
9. Market Making	9.2 Market Makers Orders	ExecutionWithinFirmShortcode is not present in the outbound Reject (07) message after a MM Sign In
9. Market Making	9.2 Market Makers Orders	Misleading error codes on reject of Quotes across contracts and Rejects In case the firm is suspended
9. Market Making	9.3 Market Maker Protection	MMP ack with updated current positions can be received before acks
10. Risk Management Services	10.2 Self Trade Prevention	FOK order are rejected with error code 6006 when STP is present on execution instruction (error code is incorrect
10. Risk Management Services	10.3 Cancel on Disconnect	CoD orders sent through the indirect path are pulled in case of HA event but Kill messages are not sent on OE

## 2. ASSOCIATED RELEASE ELEMENTS

### 2.1 SBE PROTOCOL

The deployment of Optiq in EUA is accompanied with the upgrade of SBE version 213.

The SBE templates (Order Entry and Market Data) published with the OEG and MDG specification in September 2019 is version 204. Previous SBE template on the test environment was SBE 206.

**SBE templates version 213 are functionally transparent and compatible with both 203 and 204.**

**Client are advised to Go-Live for Optiq Derivatives with version 213.**

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 target load balancing is in place in both next-EUA and Production environments.

## 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** 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 Market Data (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 File Equity Derivatives | Strike Price filled in with 0 value for a dividend future

- ◆ End of Day created strikes sent out next day before Standing Data and Start of Trading Day data, should be after

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## 4. TRADING PATTERNS & TIMETABLES

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### 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** document.

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

---

#### 4.1.1 Service limitations

The service is fully delivered in this version of Optiq.

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#### 4.1.2 Known Defects

- ◆ Commodity Options are shown as ‘Suspended by MO’ at start of day.

---

## 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** 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** document. Sending rules of the message are detailed in the specification document and illustrated in the **Euronext Derivatives Markets – Optiq Kinematics Specifications** document.

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#### **4.2.1 Service limitations**

The service is fully delivered in this version of Optiq.

---

#### **4.2.2 Known Defects**

There are no known issues.

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### **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.

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#### **4.3.1 Service limitations**

The service is fully delivered in this version of Optiq.

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#### **4.3.2 Known Defects**

No known defects are reported for the service as delivered.

## 5. TRADING ON OPTIQ

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### 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** and **Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface** documents. Associated dynamic interactions with Optiq are described in **Euronext Derivatives Markets – Optiq Kinematics Specifications** document.

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#### 5.1.1 Service limitations

The service is fully delivered in the release of Optiq.

---

#### 5.1.2 Known Defects

There are no known defects.

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### 5.2 MARKET MECHANISMS & POLICIES

Services are fully available in the release of Optiq.

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#### 5.2.1 Known Defects

There are no known defects.

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### 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** document.

---

#### 5.3.1 Service limitations

The service is fully delivered in this version of Optiq.

---

#### 5.3.2 Known Defects

There are no known defects.

---

## 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 Known Defects

- ◆ Market Update (1001) message – Incorrect NULL volume on RFQ
  - ◆ MMT Trading Mode for Uncrossing Trades is shown as Continuous
  - ◆ Price Update Event time badly populated, Clients must rely on Packet Time until fixed
  - ◆ Clearing Firm ID field allows forbidden chars to be submitted
- 

## 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** 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** and **Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface** documents.

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### 5.5.1 Service limitations

The service is fully delivered in this version of Optiq.

---

### 5.5.2 Known Defects

- ◆ Sequence in Strategy trade publication is not followed in 1004 trades publication as compared to 1001.
- 

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

The service of Implied trading through the EDIM model as described in How the Market Works is embedded in the release.

Both triggers of implied prices generation (Priority order on a Strategy market and Request for Implied) are available as described in How the Market Works. Clients are advised to read in details the rule of the matching model described in the aforementioned document.

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### 5.6.1 Service limitations

The service is fully delivered in this version of Optiq.



### 5.6.2 Known Defects

There are no known defects.

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## 5.7 IMPLIED MECHANISMS: SPONTANEOUS IMPLIED MATCHING (SIM) MODEL

Services is available and activated on calendars spreads only for Commodity Futures only, implied-In only. Constraints on the service will be gradually lifted by Euronext.

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### 5.7.1 Service limitations

The service is fully delivered in this version of Optiq.

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### 5.7.2 Known Defects

There are no known defects.

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## 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** 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

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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.

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### 5.8.1 Service limitations

The service is fully delivered in this version of Optiq.

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### 5.8.2 Known Defects

There are no known defects.

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## 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** document.

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### 5.9.1 Service limitations

The service is fully delivered in this version of Optiq.

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### 5.9.2 Known Defects

There are no known defects.

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## 6. TRADING SAFEGUARDS

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### 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.

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#### 6.1.1 Service limitations

The Service is fully delivered.

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#### 6.1.2 Known Defects

There are no known defects.

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### 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** 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

There are no known defects.

### **6.3 DYNAMIC COLLARS FOR STRATEGIES**

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

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#### **6.3.1 Service limitations**

The Service is fully delivered.

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#### **6.3.2 Known Defects**

There are no known defects.

## 7. AUTOMATED TRADE CONFIRMATION

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### 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** document.

Structure of the messages are described in **Euronext Markets – Optiq OEG Client Specifications – SBE Interface** document.

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#### 7.1.1 Service limitations

The Service is fully delivered.

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#### 7.1.2 Known Defects

There are no known defects.

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### 7.2 FUTURE SPIKE PROTECTION (FSP)

The service is fully delivered as described in How the Market Works and related specification documents :

- ◆ Market Data messages in relation with FSP : **Euronext Market – Optiq MDG Client Specifications**
  - ◆ FSP parameters : **Euronext Markets - Optiq File Specifications**
- 

#### 7.2.1 Service limitations

The Service is delivered and all futures contract have FSP activated by default. FSP functionality cannot be lifted by EMS on request.

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#### 7.2.2 Known Defects

There are no known defects.

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## 8. TRADING FEATURES & SERVICES

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### 8.1 WHOLESALES 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** and **Euronext Markets – Optiq OEG Client Specifications – FIX 5.0 Interface documents**.

Associated interaction with Optiq are described in details in **Euronext Derivatives Markets – Optiq Kinematics Specifications** document.

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#### 8.1.1 Service limitations

The Service is fully delivered.

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#### 8.1.2 Known Defects

- ◆ Book State Uncrossing is incorrectly sent out for EMM=4 - Derivatives Wholesale
- ◆ In case of LiS Package Trade or Cancellation of this trade, MMT Transaction Category not populated with TPAC
- ◆ In case of Trade Cancellation of LiS (Package) Trade, unexpected 1001 messages are sent for trade cancellation

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## 8.2 REQUEST FOR CROSS (RFC)

The service will be supported in Optiq for both versions of the algorithm. Description of the service is available in How the Market Works. Messaging sequences and Market Data dissemination (which differs depending on the algorithm) are detailed in technical specifications.

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#### 8.2.1 Service limitations

There are no limitations.

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#### 8.2.2 Known Defects

- ◆ No Statistics message sent after RFC Trade
- ◆ Cancellation of a Reaction is not allowed - rejected
- ◆ In case a reaction does not match, trade with Quantity 0 is published instead of Kill of the reaction. No impact on clearing or fees (lots traded = 0)

### 8.3 TOTAL RETURN FUTURES (TRF) SERVICE

The Contract and related specifics are available. TRF behaviour description is available in How the Market Works. Messaging sequences and Market Data dissemination (which differs depending on the algorithm) are detailed in technical specifications.

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#### 8.3.1 Service limitations

Strategies on TRF are turned off.

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#### 8.3.2 Known Defects

- ◆ Upon intraday HA event, provisional prices of TRF are recalculated based on the level of Index at HA event
  - ◆ Market Update tag 65 provided in case of LiS on TRF – TAM, has a wrongly calculated price. Resulting Price Update – Provisional Price sent following this trade has a wrong Price. Price of the trade itself is OK, from trading to clearing.
  - ◆ In case of TRF Trade Cancellation in BAPO, the Trade Cancel message MiFID Price notation field is populated in MONEY
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### 8.4 MARKET ON CLOSE (MOC) SERVICE

The service will be supported in a future version of Optiq.

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## 9. MARKET MAKING

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### 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**.

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

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#### 9.1.1 Service limitations

The Service is fully delivered.

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#### 9.1.2 Known Defects

There are no known defects.

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## 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** document.

Structure of the messages are described in **Euronext Markets – Optiq OEG Client Specifications – SBE Interface** document.

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#### 9.2.1 Service limitations

The Service is fully delivered.

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#### 9.2.2 Known Defects

- ◆ ExecutionWithinFirmShortcode is not present in the outbound Reject (07) message after a MM Sign In



- ◆ Misleading error codes on reject of Quotes across contracts and Rejects In case the firm is suspended

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### 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** document.

Structure of the messages are described in **Euronext Markets – Optiq OEG Client Specifications – SBE Interface** document.

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#### 9.3.1 Service limitations

The Service is fully delivered.

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#### 9.3.2 Known Defects

- ◆ MMP ack with updated current positions is received before orders' acks

## 10. RISK MANAGEMENT SERVICES

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### 10.1 EURONEXT RISKGUARD

The service is fully supported as described in How the Market Works and in the FIX Protocol specification issued by Euronext.

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#### 10.1.1 Service limitations

The service is fully delivered in this version of Optiq.

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### 10.2 SELF-TRADE PREVENTION (STP)

The service is fully supported as described in How the Market Works and the dedicated background document issued by Euronext. As a reminder, on Euronext Derivatives, STP is applicable to both LP and House accounts.

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#### 10.2.1 Service limitations

The service is fully delivered in this version of Optiq.

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#### 10.2.2 Known Defects

- ◆ FOK order are rejected with error code 6006 when STP is present on execution instruction (error code is incorrect)
- 

### 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** document.

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#### 10.3.1 Service limitations

The service is fully delivered in this version of Optiq.

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#### 10.3.2 Known Defects

- ◆ CoD orders sent through the indirect path are pulled in case of HA event but Kill messages are not sent on OE

## 10.4 DROP COPY

The service is delivered according to the specification document published in September 2019 – with limitations due to defects.

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### 10.4.1 Service limitations

The service is fully available.

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### 10.4.2 Known Defects

- ◆ tag 539 says there are 2 NestedParties, but tag 524, 525, 538 appear only once (and in the wrong order w.r.t. tag 539] (Drop Copy)
- ◆ Value C provided in field NestedPartyIDSource (525).
- ◆ Order of fields must be correct between the First field (counter) and the second field of each repeating group (Drop Copy)
- ◆ Some Rejects generated without Client Order ID
- ◆ TRF : Tags missing in Drop Copy logs like Message price Notation
- ◆ Drop copy Set Up mismatch: session setup for Order Only, Drop copy sends out Trade messages as well
- ◆ Drop Copy- wrong price in tag 31

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## APPENDIX A: REVISION HISTORY

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### 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.
1.1	23 July 2019	Euronext	Finalization of the configuration and start of the conformance testing period
1.2	12 Sep 2019	Euronext	Delivery of Additional Optional Services
1.3	25 Oct 2019	Euronext	Release Note for Full Functional Scope Delivery
1.4	25 Nov 2019	Euronext	Release note for Go-live