

Document title

**EURONEXT OPTIQ PHASE 3: DERIVATIVES MARKETS - ORDER ENTRY GATEWAY (OEG), MATCHING ENGINE (ME) AND MARKET DATA GATEWAY (MDG) MIGRATION GUIDELINES**

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## PREFACE

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### PURPOSE

This document outlines the migration guidelines for Phase 3 of Euronext's implementation of Optiq: Order Entry Gateway (OEG) and Matching Engine (ME) for Euronext Derivatives markets, as well as the changes required to the Market Data Gateway (MDG) on Euronext Derivatives markets.

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### TARGET AUDIENCE

The intended audience of this document is any client intending to connect to and trade on the Euronext Derivatives markets using Optiq.

This document is for informational purposes only, and should be consulted alongside its associated documents outlined below.

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### WHAT'S NEW?

The following lists only the most recent modification made to this revision/version. For the Document History table, see the Summary of Changes.

REVISION NO./ VERSION NO.	CHANGE DESCRIPTION
2.0	<p>Second release of Optiq Phase 3 migration of Euronext Derivatives markets to Optiq OEG / ME / MDG containing the following updates:</p> <p>In "ASSOCIATED DOCUMENTS" – note on what documents were already published. Removed "Euronext Cash Markets - Change Highlights – Optiq MDG Phase 1 to 3".</p> <p>In 2.2.2 "Partitions and Instrument Mapping" – removed "subject to final confirmation". Corrected name of MDG specifications page.</p> <p>In 3.1.1. "SBE compatibility" – changed V1## to reflect V200. Added note on Completed steps.</p> <p>In 3.1.2 – Updated table to reflect SBE V2XX</p> <p>In 3.1.3 "Symbol Index of Existing Instruments" – added note that active and dormant strategies will not maintain their existing symbol index values.</p> <p>In 3.2.1 – Updated text to reflect completed event</p> <p>In 3.2.2 – Updated the table of changes and note on the partition change target for Next EUA, Current EUA, and Production. Created table with effective dates. Added notes on EFS for Current EUA and Production</p> <p>In 4.1 – Added completed notes.</p> <p>In 4.2 "Migration Sequence" – added Completed step.</p> <p>In 4.2.1 "Market data segmentation change" – Updated section to reflect the completed steps.</p> <p>In 4.2.2 – Added note of early market closure on Friday before migration to Optiq. Modified order purge to 19:15 CET, added table with contracts closing early. No evening session.</p> <p>In 4.2.3 – Updated information about the merger of contracts implementation</p> <p>In 4.3.1 "Drop Copy" – amended name of document.</p> <p>In 4.3.5 – renamed Optiq file specifications reference.</p> <p>In 4.3.5 "Euronext File Services (EFS)" removed a file "Derivatives Parameter file", as it will be part of the overall Derivatives Standing data file</p> <p>In 4.4 - Added note on completed steps, added note on upcoming steps. Moved certain info to the Customer Checklist table.</p> <p>In 4.4.1 – Updated text and removed the table as completed step</p> <p>In 4.4.2 – amended text to reflect completed steps. Changed note about Drop Copy availability for a later stage.</p> <p>In 4.4.2.1 – Updated technical documentation to be provided in September</p> <p>In 4.4.3 – Added table for list of conformance tests and requisites. Removed duplicate sentence.</p> <p>In 4.4.4 – added note that trading members must confirm with their clearing member, also added note for starting date and LCH v-EUA connectivity.</p>

REVISION NO./ VERSION NO.	CHANGE DESCRIPTION
	<p>In 4.4.6 – removed duplicate table</p> <p>In 4.4.7 – Updated six to two to four weeks</p> <p>In 4.5 – Added note on completed step, updated content, moved content from section 4.4.</p> <p>In 4.6.1 – updated document title and note for telnet</p> <p>In Appendix B “MAPPING OF CLEARING FIELDS - OEG TO LCH” – corrected SBE name of the field from Posting Action to Open Close</p> <p>In 5 – Updated text and dates inside table</p> <p>In 7 – Updated list of document</p> <p>In 8 – Updated support details</p> <p>In Appendix B “MAPPING OF CLEARING FIELDS - OEG TO LCH” – corrected SBE name of the field from Posting Action to Open Close</p> <p>In Appendix D “FILES &amp; FOLDERS FOR IMPLEMENTATION OF PHASE 3” – updated to contain the Target Setup of Files and Folders for Phase 3</p>

## ASSOCIATED DOCUMENTS

The following lists the associated technical documents which either should be read in conjunction with this document or which provide other relevant information for customers.

The documents listed below are available for Phase 3, with the latest version applicable to Phase 3 indicated, where applicable:

- Euronext Derivatives: How the Market Works <sup>[v2.0]</sup>
- Euronext Markets – Optiq File Specification (first update for Phase 3) <sup>[v3.0.1]</sup>
  - ◆ *TRF Conversion Parameters Files Specifications (to be incorporated into the Optiq File specifications in a future update of the specifications)*
- Euronext Markets – Optiq MDG Client Specifications (first update for Phase 3) <sup>[v3.0.1]</sup>
- Euronext Markets – OEG Client Specifications – SBE Interface <sup>[v2.0.0]</sup>
- Euronext Markets – OEG Client Specifications – FIX 5.0 Interface <sup>[v2.0.0]</sup>
- Euronext Derivatives Market – Optiq Kinematics Specifications <sup>[v1.0.1]</sup>
- MDG SBE Template file (first update for Phase 3) <sup>[v200]</sup>
- OEG SBE Template file (first update for Phase 3) <sup>[v200]</sup>
- Euronext Markets – Optiq SBE Template Policy for the Migration of Derivatives Markets
- Euronext Markets – Optiq & TCS Error List
- Euronext Markets – Optiq OEG Connectivity Configuration specifications (updated for Phase 3) <sup>[v2.1.0]</sup>
- Euronext Optiq Market Data Gateway External User acceptance Environment <sup>[v2.1]</sup>
- Euronext Optiq Market Data Gateway Production Environment <sup>[v2.2]</sup>
- Euronext Markets – Optiq Phase 3 Production Connectivity Telnet Tests <sup>[v1.0]</sup>
- Optiq Euronext File Services (EFS) User Guide
- Optiq Phase 3 Tick Size Summary
- Optiq Phase 3 Derivatives Spread Classes
- Optiq Phase 3 Trading Schedule Summary

In the coming months the following technical & functional documentation will be published for Phase 3:

- Euronext Markets – Drop Copy service description

- Euronext Markets – Optiq OEG Throttling Mechanism (will be incorporated into *Euronext Markets – Optiq OEG Connectivity Configuration specifications* )

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

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

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## 1. INTRODUCTION

Euronext announced the launch of its new generation technology programme in May 2016, which is delivering improved customer experience through the migration from its current technology platform UTP to its new leading edge platform: Optiq®.

Optiq delivers a simplified harmonized messaging model with maximum flexibility, within a single trading platform for Cash and Derivatives, providing clients with high performance and stability. The migration is managed in phases and began in 2017 with the migration of the market data infrastructure, followed in 2018 by the migration of the Cash markets to the new order entry and matching engine modules, and will be finalized with the migration of the Derivatives markets.

The move to Optiq has allowed Euronext to deliver an enhanced multi-market trading platform, leveraging the latest technology to ensure high reliability and to significantly enhance throughput and predictable latency. This simplified and flexible system allows shorter time-to-market for the delivery of new products and the implementation of customers' requests, while creating an opportunity for customers to reduce their administrative costs.

### 1.1 SCOPE OF OPTIQ PHASE 3

This document outlines the changes and improvements between the current Common Customer Gateway (CCG) and UTP Matching Engines, and the new Optiq Order Entry Gateway (OEG) and Matching Engine (ME) architecture, and will accompany readers during the migration process for Phase 3 on Derivatives markets. This document also provides information on the upgrades scheduled on the existing Market Data Gateway on Euronext Derivatives markets.

#### SCOPE OF MARKETS AND PRODUCTS COVERED BY OPTIQ PHASE 3

Markets and Products		
Derivatives markets (OEG, ME & MDG)	Equity Derivatives	✓
	Index Derivatives	✓
	Commodities	✓
	Financial Derivatives	✓

Note: AtomX is being decommissioned. Hosted commercial markets are out of scope of this migration.

#### SCOPE OF DERIVATIVES SERVICES COVERED BY OPTIQ PHASE 3

Services	
Drop copy	✓
Euronext File Server (EFS)	✓

## 2. ORDER ENTRY GATEWAY OVERVIEW

The Euronext Optiq Order Entry Gateway (OEG) provides high-speed and real-time connection to the Euronext markets. The system offers predictability, ultra-low latency, Cash & Derivatives message harmonization, high availability, a reliable network solution, and a high level of scalability.

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### 2.1 ORDER ENTRY MESSAGES

In Optiq a number of messages used for the Euronext Cash markets are reused, and in some cases further enriched, for Euronext's Derivatives markets. Derivatives specific messages (e.g. for Market Maker Protection, Request for Cross, etc.) have been added to Optiq messages catalogue.

The technical specifications that will be published in the future for Optiq Phase 3 will be the reference for the available messages, their structure, available values and kinematics.

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### 2.2 NEW CONNECTIVITY MODEL

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#### 2.2.1 Optiq Segments

Euronext's new connectivity model improves performance and stability by offering order entry sessions through Logical Accesses, which connect to dedicated partitions in individual Optiq segments.

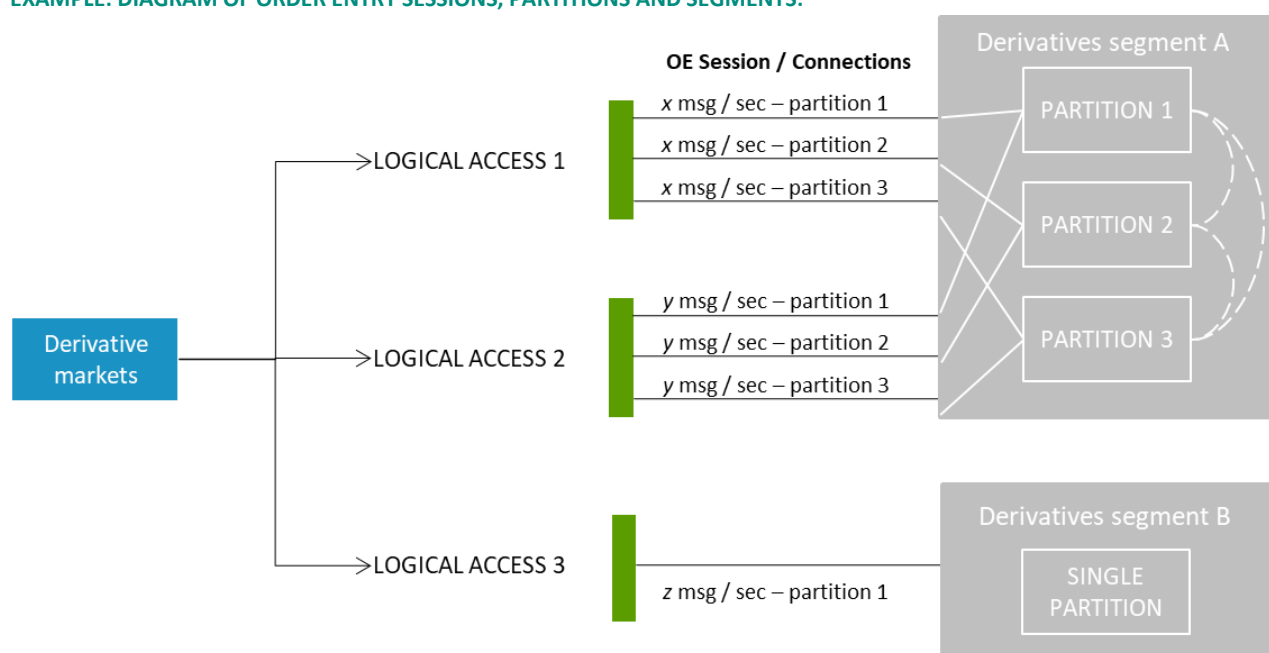
Under the current UTP and CCG trading infrastructure, a single order entry session setup under an Individual Trader Mnemonic (ITM) and Member Mnemonic (MNE) can technically access all Derivatives contracts.

This will change under Optiq:

- Derivatives contracts will be grouped by asset class into Optiq Segments for order entry.
  - **Optiq has four Derivatives segments: Equity Derivatives, Index Derivatives, Commodities, and Financial Derivatives.**
- Each segment may be split into Partitions in order to benefit from improved performance and stability.
- To connect to a Partition, an Order Entry Session (OE Session) is required.
- OE Sessions are aggregated in a Logical Access for each segment.
  - With a Logical Access, customers are automatically given access to all Partitions within a segment.
  - Customers can choose to send an order to a Partition using the wrong OE Session and will be routed automatically. Latency is to be expected when using this route.
- One Logical Access can only apply to one segment. Using the same connection across multiple Optiq segments will not be possible.
- All instruments of a single contract will be available for trading in a single partition



**EXAMPLE: DIAGRAM OF ORDER ENTRY SESSIONS, PARTITIONS AND SEGMENTS:**



Logical Access requirements are as follows:

- To send messages to an instrument hosted on any segment, the client requires a Logical Access on that specific segment. For instance, to send messages to an instrument hosted on the Equity Derivatives segment, the client requires a Logical Access on Equity Derivatives.
- The same Logical Access for a segment can be used to send orders for Central Order Book (COB), wholesales and Request for Cross (RFC).
- Logical Accesses are assigned a Functional Access Role. The list of such roles for Derivatives contains: Trading, Market Making, and RiskGuard.
  - ◆ Logical Access with role of Trading can send all private messages, except those associated to Market Maker Quotes, and RiskGuard.
  - ◆ To send Quote messages clients will require a Logical Access with role of Market Making. Such Logical Accesses can send any Trading and Market Making messages.
  - ◆ To send messages to an OEG for RiskGuard, clients will require a dedicated Logical Access setup for risk management purposes. Such Logical Accesses can send only messages associated to RiskGuard

Drop Copy is provided as a separate service, for which a dedicated Drop Copy Access is to be requested, and which has dedicated connectivity information.

Referential standing data is provided on a daily basis for each Contract via MDG messages and files (available on EFS), identifying which Optiq Segment and partition an instrument belongs to.

More details can be found in the **Euronext Cash and Derivatives Markets – Optiq File Specification**, and will also be provided in a future version of the **Euronext Optiq - Derivatives Markets Order Entry Gateway Sessions pricing and capacity** documents, available on the Optiq page <http://www.euronext.com/optiq/>.

### 2.2.2 Partitions and Instrument Mapping

Individual Optiq Segments are comprised of one or several Optiq Partitions.

An Optiq Partition is a technical subdivision of an Optiq Segment. Each Partition relies on an optimized technical environment, physically independent from one another, and connected via a routing system to other partitions within the segment.

The target number of partitions per segment are as follows:

Derivatives Optiq Segment	Number of Partitions
Equity Derivatives	3
Index Derivatives	1
Commodities	1
Financial Derivatives	1

One Logical Access will give access to all Partitions belonging to the same Optiq Segment. For example, one Equity Derivatives Logical Access will be able to connect to each of the 3 Equity Derivatives partitions, using 3 OE Sessions.

Within the same Optiq segment, the load balancing process may result in instruments being assigned a different Partition, and as such different routing information, from one day to another. Due to this, clients are encouraged to plan developments to leverage this dynamic structure and to download and incorporate the standing data on a daily basis to ensure correct routing of their messages. For more information please refer to the OEG Message specifications.

All contracts and instruments for Euronext markets are uniquely defined by their Symbol Index. The Symbol Index is valid for the lifetime of the instrument and is used as the Optiq system-wide identifier. Both public and private messaging systems rely on this identification, which also allows for an easier reconciliation of public and private messages.

Together with the Symbol Index Optiq uses the *Exchange Market Mechanism* (EMM) to route messages to the correct trading platform. EMM represents the platform to which the order sent by the client must be routed. Information on Symbol Index and EMM values available in each Optiq segment is provided in the Standing data files, and a Symbol Index may be assigned multiple EMMs

Please refer to the *Euronext Markets - Optiq MDG Client Specifications* document for further details on standing data files.

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## 2.3 ORDERING OEG LOGICAL ACCESSES

Ordering of the Optiq Logical Accesses for Derivatives Markets can be done using the same [OE session order form](#) as currently used for the Cash markets.

*Note: A dedicated communication informing customers that they can order their sessions for the Derivatives segments will be issued providing further details on this.*

In addition to other characteristics, when ordering Logical Accesses for Derivatives markets clients would need to identify whether they are to be used for Market Making activity (to allow use of Quote messages) or

RiskGuard API. Existing RiskGuard API clients will need to request new accesses for this, using the [same order form](#) currently in use.

To order Drop Copy Accesses clients should submit a [Drop Copy order form](#).

### **External User Acceptance (EUA) environments**

For the launch of Derivatives segments on Optiq in the Next EUA environment, each existing client, identified by a Member Code (or Firm ID), will be provided with a number of “default” Logical Accesses per Optiq Segment: with connections for SBE and FIX protocol, as needed. These connections will be set with minimum throughput to allow clients to start their technical tests while the analysis of identifying the size and number of connection required in Optiq is in progress.

In addition to the default Logical Accesses, clients may request connections for Throttling and/or capacity testing. The sessions should be setup with a size similar to one expected to be requested for Production. This should allow clients and Euronext to perform tests in Optiq in the most realistic conditions.

The requests for adjustment and/or creation of new Logical Accesses in EUA environments can be submitted via the EUA form for [ordering of new](#) and/or [modification of existing](#) Logical Access.

OEG connectivity details for EUA environment will be made available ahead of the start of testing period.

Requests for Drop Copy access for EUA environments can be submitted via the [Drop copy Access creation form](#). For this request clients should make sure to select the environment as the same form is used for requests for the Production environment.

### **Production environment**

Each Member Connectivity Administrator (MCA) will receive an e-mail containing projected number and size of Logical Access based on their current ITM use. This should allow members to easily identify the number of sessions required for OEG Derivatives, as well as a suggested message per second throughput limits.

OEG connectivity details for Production will be made available ahead of the start of the Dress Rehearsals.

All Trading Members using the new Optiq OEG ME Derivatives trading system are required to order their Optiq Derivatives Logical Accesses for Production prior to the start of the Dress Rehearsals.

Please note that **Providers (ISVs, ASPs) do not have the ability to order OE Sessions on behalf of their clients.**

For any questions, please contact your CSC relationship manager.

The Order Forms are available online on the Euronext website at the following locations:

- Optiq Order Entry
  - [Logical access \(former ITM\) creation form](#)
  - [Logical access modification form](#)
  - [Logical access deletion form](#)
- Optiq Order Entry (Market Makers)
  - [Logical access creation Market Maker form](#)
  - [Logical access Market Maker temporary deactivation form](#)
  - [Logical access Market Maker reactivation](#)

- Optiq Drop Copy
  - [Drop copy Access creation form](#)
- RiskGuard (for Derivatives)
  - [RiskGuard Logical access creation form](#)
  - [RiskGuard Logical access modification form](#)
  - [RiskGuard Logical access deletion form](#)

After receiving a request for a Logical Access, Customer Access Services will communicate login information to customer by email. Customers are required to have tested their connectivity in Production before the mandatory Dress Rehearsal.

As a reminder:

- Providers cannot order OEG Logical Accesses for Production
- Only trading members can order Production OEG Logical Accesses
- Logical Accesses can only be ordered by a nominated Member Connectivity Administrator (MCA). Any customer without an MCA account should contact the Customer Access Services (CAS) team for more information at [cas@euronext.com](mailto:cas@euronext.com) / Tel: +33 1 85 148 589

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## **2.4 ORDER ENTRY SBE TEMPLATES**

New SBE templates will be introduced for order entry for Derivatives Markets migrating to Optiq.

The SBE template to use for OEG will be published with the order entry message specifications on the Euronext website.

During the conformance period, order entry and market data SBE templates for Derivatives segments will be available in their target version, i.e. with a new order entry and market data SBE templates on EFS.

Cash markets will remain with the SBE templates that are currently set up for each individual segment, as announced for individual projects and provided on EFS.

On Optiq, the SBE template will be provided for individual segments. For the migration of Derivatives markets to Optiq, the content of the SBE templates will be the same for all segments.

### 3. MARKET DATA GATEWAY OVERVIEW

The Euronext Optiq Market Data Gateway (MDG) provides real-time data for the Euronext markets. MDG messages provided in Optiq are already harmonized for Cash and Derivatives. SBE templates currently in use for MDG on Derivatives markets will change with Optiq Phase 3.

#### 3.1 SBE TEMPLATES & CHANGES

SBE templates currently in use for MDG on Derivatives markets will change with Optiq Phase 3.

- SBE templates will be aligned with the way SBE templates are managed on Cash markets: each segment will have its own SBE template.
- When changing to (i) Optiq market data segments and (ii) Optiq Order Entry Gateway (OEG) & Matching Engine (ME), the SBE templates for MDG will not be backward compatible. Both changes will require a new non-backward compatible SBE template.
- After the migration to Optiq OEG and ME, the exact same versions of the SBE template will be available on each segment.

A summary of changes between the templates currently provided in Production, the new market data segments and the implementation of Optiq Order Entry Gateway (OEG) & Matching Engine (ME) are provided in the MDG change highlights.

The exact version number of the SBE template to use will be published and communicated with the technical specifications of Phase 3.

Please note: The template should be managed on the individual segment level as in the future versions of SBE Templates will differ per segment.

##### 3.1.1 SBE Compatibility

MDG SBE compatibility for Phase 3:

- Will be maintained, when possible, compared to the current Cash MDG SBE template in Production (version 7).
- Will not be maintained compared to the current Derivatives MDG SBE template in Production (version 6).

Updates of the target SBE templates for Phase 3 will be published with the rest of the technical documentation. The Phase 3 technical documentation will identify where compatibility will not be maintained.

In the MDG SBE template 7 (used for Segment Change) messages that are for use by Cash markets only, and not required for the Derivatives markets have been removed. These messages will be added back, in their used / target format, in the MDG SBE template to be published for “go live” of Phase 3.

	Next EUA (p-EUA)			Production		
Date	Before 20 Feb '19	20 Feb '19	June '19	Before 27 Apr '19	27 Apr '19	23 Nov '19
MDG SBE Template status	V6 or earlier only. V7 cannot be used (COMPLETED)	V7 only V6 and earlier versions can no longer be used (COMPLETED)	V2XX only V7 and earlier versions can no longer be used	V6 or earlier only. V7 cannot be used (COMPLETED)	V7 only V6 and earlier versions can no longer be used (COMPLETED)	V2XX only V7 and earlier versions can no longer be used

### 3.1.2 SBE Template Version

On Optiq, the SBE template will be provided for individual segments. For the migration of Derivatives markets to Optiq, the content and version of the SBE templates will be the same for all segments.

Before being made available on EFS, the SBE template to use for MDG will be published with the update of MDG client specifications on the Euronext website.

	SBE template version	
	Order Entry	Market Data Gateway
Optiq market data segmentation change		7
Phase 3 migration	V2XX	V2XX

### 3.1.3 AMR and Symbol Index for Migration

#### Automated Market Reference (AMR)

Optiq uses Symbol Index as the unique identifier of all tradeable instruments. As such, AMR as the core Contract and tradeable instrument identifier for trading is replaced by the Symbol Index.

In parallel of Symbol Index, the **AMR code remains available in the standing data** and allows to map instrument Symbol Index used for trading to the AMR code.

The structure of AMR code will have minor adjustments to manage the management of daily and weekly contracts in a single contracts. For more details on this change clients are advised to review a dedicated section of the “How the Market Works”, and a future update of the MDG Client specifications that would be updated for migration of Derivatives markets to Optiq.

#### Example

Instrument	In UTP / MDG		In Optiq	
	AMR	Symbol Index	AMR	Symbol Index
A.F.AA8 – Dec 22	AFAA8221200000F	4221800006	AFAA8_22121600000F	4221800006
A.F.ABCD – Dec 22	N/A	N/A	AFABCD22121600000F	4325600019

#### Symbol Index of Existing Instruments

For migration to Optiq outright instrument existing prior to the migration will maintain their existing symbol index values.

All active and dormant strategies will not maintain their existing symbol index values. On the first day of trading on Optiq they will have new symbol index values attached to them as they are created.

## 3.2 CHANNEL CHANGES

### 3.2.1 Market Segmentation (Completed)

The change in the segmentation of the Derivatives market was successfully completed.

### 3.2.2 Partition Changes for Phase 3 Implementation (Updated)

Following implementation of MDG Market segmentation MDG channel configuration will be further impacted by the change in the number of partitions as follows:

- Partition ID “1” will be removed for the Index Derivatives segment. All messages that were sent via that partition will be sent via existing partition “0”
- Partition ID “2” will be added in the Equity Derivatives segment. Messages in the partitions will be sent according to the assignment of partitions in Contract standing data

The channel and MDG set of channel configuration change will result in the following:

MDG Set of Channels			Segment & Partitions				
			Change?	Current		New	
Contract Groups	ID	Name		Segment	Partition	Segment	Partition
PO	20	Equity Derivatives France	✓	Equity Derivatives (12)	0	Equity Derivatives (12)	0 + 1 + 2
PF	20	Equity Derivatives France	✓	Equity Derivatives (12)	0	Equity Derivatives (12)	0 + 1 + 2
BO	22	Equity Derivatives Other	✓	Equity Derivatives (12)	0	Equity Derivatives (12)	0 + 1 + 2
BF	22	Equity Derivatives Other	✓	Equity Derivatives (12)	0	Equity Derivatives (12)	0 + 1 + 2
SF	22	Equity Derivatives Other	✓	Equity Derivatives (12)	0	Equity Derivatives (12)	0 + 1 + 2
AO	24	Index Options Netherlands	✓	Equity Derivatives (12)	1	Equity Derivatives (12)	0 + 1 + 2
AF	21	Equity Derivatives Netherlands	✓	Equity Derivatives (12)	1	Equity Derivatives (12)	0 + 1 + 2
KF	27	Index Futures Netherlands	No	Index Derivatives (11)	0	Index Derivatives (11)	0
KO	27	Index Futures Netherlands	No	Index Derivatives (11)	0	Index Derivatives (11)	0
FO	25	Index Derivatives Other	No	Index Derivatives (11)	0	Index Derivatives (11)	0
FF	25	Index Derivatives Other	No	Index Derivatives (11)	0	Index Derivatives (11)	0
MF	25	Index Derivatives Other	No	Index Derivatives (11)	0	Index Derivatives (11)	0
JF	26	Index Futures France	✓	Index Derivatives (11)	1	Index Derivatives (11)	0
JO	23	Index Options France	✓	Index Derivatives (11)	1	Index Derivatives (11)	0
YO + YF + RO + RF	16	Commodity Derivatives	No	Commodity Derivatives (8)	0	Commodity Derivatives (8)	0
ZO	17	Currency Derivatives	No	Financial Derivatives (13)	0	Financial Derivatives (13)	0
ZF	17	Currency Derivatives	No	Financial Derivatives (13)	0	Financial Derivatives (13)	0

	PARTITION CHANGE DATES		
	Next EUA (pEUA)	Current EUA (vEUA)	Production
Effective date of the Partition change	26 June 2019	9 July 2019	7 September 2019

### **Next EUA (pEUA)**

The partition change for Next EUA will be effective from the start when the platform opens in June 2019 with Optiq OEG/ME/MDG.

This platform will therefore open up directly in target mode with associated market data changes and 3 partitions for Equity Derivatives and 1 partition each for Index Derivatives, Financial Derivatives, and Commodities with Order Entry on Optiq.

### **Current EUA (vEUA)**

The partition change in Current EUA will take place in July 2019.

This change to the Market data configuration will be done in the same way as it will occur in with UTP still remaining as the source and order entry via CCG.

Clients are advised to download the Derivatives Standing Data for Current EUA from EFS, updated with the effective partition configuration, on 9 July 2019 after 11:00 CET.

### **Production**

The partition change in Production will take place in September 2019.

The impact is in market data with UTP as a source and order entry still via CCG.

There will be no impact on CCG / Order entry.

Derivatives Standing Data files with the updated partition configuration for Monday 9 September 2019 will be made on Saturday 7 September 2019. Clients are advised to download the files on Saturday after 11:00 CET. The files on Saturday will be available with the date of Monday.



## 4. MIGRATION PLAN

### 4.1 OVERVIEW

The migration of Derivatives markets from the Common Customer Gateway (CCG) to the Optiq Order Entry Gateway (OEG) and the upgrade of the Market Data Gateway (MDG) are designed with customers in mind to secure a simple and effective transition to the Optiq platform.

The technical migration to Optiq in Production will be conducted in a single Go Live weekend. Prior to this Go Live date a number of preparatory events, infrastructure and high availability tests and rehearsals will be held to ensure a smooth migration.

The migration plan is the following:

	PRODUCTION MIGRATION DATES		
	Dress rehearsal	Final test in Production	Go Live
<b>1. Change Derivatives market data segmentation</b> Optiq segmentation was implemented prior to the OEG and ME migration, effective in MDG and EFS. A new MDG SBE template was provided for this change, without any impacts to CCG order entry or GTC/GTD orders.	Saturday 6 April 2019 (COMPLETED)	Saturday 27 April 2019 (COMPLETED)	Monday 29 April 2019 (COMPLETED)
<b>2. Migrate the Derivatives markets to Optiq</b> Purge orders on all UTP-D contracts at the end of the trading session on Friday prior to migration. A new SBE template for MDG and OEG will be provided. Open markets with all Derivatives segments on Optiq on Monday: <ul style="list-style-type: none"> <li>Order entry is conducted through OEG,</li> <li>All orders placed through CCG will be rejected.</li> </ul>	Saturday 19 October 2019 (no purge) Saturday 9 November 2019 (no purge)	Saturday 23 November 2019	Monday 25 November 2019
<b>3. Combining contract with shorter and longer maturities</b> Shorter term expiries (daily, weekly) currently managed in individual contracts to be migrated into the main contracts.	N/A	N/A	Q1 2020

Software will be released in the test environment in order to enable customers to validate their software prior to Go Live. Details on the test and production environments can be found in later sections.

Please note that upon the migration of Derivatives segments to Optiq, these contracts will no longer be available for trading on UTP, and once Optiq Phase 3 is in Production, customers will no longer be able to send messages to the Euronext Derivatives market through the existing CCGs as no backward compatibility will be available between CCGs and OEGs.

**Phase 3 changes will not require development on the Cash markets' Optiq order entry and market data.** Other projects on Cash markets may occur at the same time and may require separate development.

## 4.2 MIGRATION SEQUENCE

The section below identifies the individual steps for the migration of Derivatives Markets to Optiq.

The migration will take place in three steps:

- 1) **Market data segmentation change (COMPLETED)**
- 2) **Optiq Order Entry Gateway (OEG) & Matching Engine (ME) implementation**
- 3) **Merger of Contracts with Maturities Shorter than one Month under one contract**

### 4.2.1 Market data segmentation change (Completed)

The first step in the migration to Optiq was the change in the segmentation of the Derivatives market, impacting MDG, which was completed in Production on Monday 29 April 2019. The completed steps of this change are listed in the table below.

MARKET DATA SEGMENTATION CHANGE – PRODUCTION IMPLEMENTATION SCHEDULE		
Sequence	Requirement	Effective Date
<b>Dress Rehearsal</b>	Customers testing of connectivity to the new channel configuration and access to new folders and file names on EFS.	<b>Saturday 6 April 2019 (COMPLETED)</b>
<b>Implementation of the change</b>	Implement the segmentation change in Production, with customer testing similar to the one done during Dress Rehearsal.	<b>Saturday 27 April 2019 (COMPLETED)</b>
<b>Using the new segmentation in Production</b>	Derivatives markets started using the new market data segmentation and an updated MDG SBE template.	<b>Monday 29 April 2019 (COMPLETED)</b>

### 4.2.2 Migrating Derivatives Markets Order Entry and Matching Engine to Optiq

#### Dress Rehearsals:

On Saturday, **approximately 7 weeks before the migration** of the Euronext's Derivatives Markets, Euronext will organise two mandatory **Dress Rehearsals** in anticipation of the migration week-end. Euronext will open the Derivatives market for customers to test access to the new Optiq segments through their OE sessions and the corresponding MDG channels. This will enable customers to verify their connectivity to the Production environment, log on / log off and inject orders into the OEG in Production.

Customers will not be authorised to take part in the Dress Rehearsal week-end unless they have (i) validated their conformance test, (ii) confirmed Telnet connectivity to Production and Disaster Recovery and (iii) ordered their Logical Accesses for Production.

There will be two Dress Rehearsal week-ends for the migration of the Derivatives markets, participation in only one of these rehearsals is mandatory. Customers who have missed on both Dress Rehearsal dates will be able to test access to Production on the migration week-end. Euronext will not consider any requests or potential customer issues encountered on the day of the Production migration if the customer has not taken part in the prior mandatory Dress Rehearsals.

## Migration:

On the **Friday before the Derivatives markets migration** to Optiq, certain contracts will close earlier than normal.

There will be no evening session, i.e. no T+1 cleared trades, on that Friday.

All Orders will be **purged** by Euronext Market Surveillance (EMS) for GTC and GTD orders on all instruments at 19:15 CET.

Customers who disconnected their systems from the order book prior to the purge are required to purge their own orders. Please note that Euronext will not be able to restore the order book in case of an incident during the migration week-end.

The contracts listed below will close earlier than normal:

	Class ID	Normal Close Time	Close on Friday before Optiq migration
AEX Index Weekly Future - Week 1	K.F.1FT	22:00 CET	18:30 CET
AEX Index Weekly Future - Week 2	K.F.2FT	22:00 CET	18:30 CET
AEX Index Weekly Future - Week 4	K.F.4FT	22:00 CET	18:30 CET
AEX Index Weekly Future - Week 5	K.F.5FT	22:00 CET	18:30 CET
FUTURE AEX INDEX	K.F.FTI	22:00 CET	18:30 CET
AEX Index - Mini Future	K.F.MFA	22:00 CET	18:30 CET
CAC 40 Index Weekly Future - Week 1	J.F.1FC	22:00 CET	18:30 CET
CAC 40 Index Weekly Future - Week 2	J.F.2FC	22:00 CET	18:30 CET
CAC 40 Index Weekly Future - Week 4	J.F.4FC	22:00 CET	18:30 CET
CAC 40 Index Weekly Future - Week 5	J.F.5FC	22:00 CET	18:30 CET
CAC 40 Index	J.F.FCE	22:00 CET	18:30 CET
CAC 40 Index - Mini Future	J.F.MFC	22:00 CET	18:30 CET
FTSE EPRA/NAREIT Eurozone Index - STND FUT	J.F.EPE	20:00 CET	18:30 CET
FTSE EPRA/NAREIT Developed Europe Index - STND FUT	J.F.EPR	20:00 CET	18:30 CET
FTSEurofirst 80	J.F.FEF	20:00 CET	18:30 CET
FTSEurofirst 100	J.F.FEO	20:00 CET	18:30 CET

Members may cancel their orders directly if they wish to do so before the indicated times.

All cancelled orders will lose their existing order book priority. New orders may be submitted the following trading day. Newly submitted orders will obtain a new priority that applies to the relevant financial instrument (i.e. price/time). Members are encouraged to immediately reflect these cancellations back to their clients.

Cash instruments will continue to be traded via already established OEGs on Optiq for Cash markets. Order book purges on Derivatives will not result in any migration-related order book purge on the Cash markets.

On the **Saturday of the migration** to Optiq, **Euronext will migrate all Derivatives markets contracts onto Optiq and will open the markets to customers** who wish to test their functional and technical access to the new trading chain application.

On the **Monday of the migration**, **Optiq will start up in production offering all of Euronext's Derivatives markets**, and **UTP-Derivatives will not be available for trading**. Orders on Derivatives markets submitted through the CCG will be rejected. The SBE templates for each market segment will be available on the EFS. For migration to Optiq OEG and MDG will be using the same version of the SBE template for all Derivatives segments.

DERIVATIVES MARKETS MIGRATION – PRODUCTION IMPLEMENTATION SCHEDULE		
Sequence	Requirement	Effective Date
Dress Rehearsal	The market will open, customers will test that they have access to their Order Entry Session, log on, inject orders, receive market data messages and log off. The SBE templates for order entry and market data will be available during the Dress Rehearsal. Orders sent to the CCG will be rejected. Once the tests are complete, Euronext will shut down Optiq and customers will restore their systems to their status on Friday night at market close. Customers will be required to fill in a webform to confirm they participated in the Dress Rehearsal(s). A link will be provided in due course.	Saturday 19 October 2019  Saturday 9 November 2019
Early close & Order Book purge	Friday before the Derivatives markets migration to Optiq, certain contracts will close earlier than normal. There will be no evening session. At 19:15 CET EMS will purge all orderbooks on UTP Derivatives.	Friday 22 November 2019
Migration of Derivatives Contracts to Optiq OEG ME	All Derivatives Segments are migrated to the new Optiq OE/ ME/ MDG trading chain. Access to Euronext Derivatives Markets through CCG is no longer possible. The SBE templates for order entry and market data will be updated accordingly.	Saturday 23 November 2019
Verification of the successful migration to Optiq	Use of new SBE template for order entry and market data. The market will open, customers will test that they have access to their Order Entry Session, log on, inject orders, receive market data messages and log off.	Saturday 23 November 2019
Updated SBE templates on order entry and market data	New SBE templates for order entry and market data will be available for all Optiq Derivatives segments and should be used for start of trading on Optiq.	Monday 25 November 2019
Sending orders on all Derivatives market segments on Optiq	Customers send orders through the Optiq OEG. Orders sent to the CCG will be rejected.	From Monday 25 November 2019
Merger of Contracts with maturities shorter than one month	Customers to adjust their configuration for MMP & Strategies used for expiry roll for the phased merger of contracts with maturities shorter than one month	Q1 2020

#### 4.2.3 Merger of Contracts with Maturities Shorter than one Month

As part of the migration of Derivatives markets to Optiq, technical changes will be made to allow the merger of contracts with shorter term expiries (Daily, Weekly) under the main contracts. To allow a smooth migration between (i) the contracts, (ii) the management of the position management and (iii) the roll of expiries, the merger of contracts will take place after the technical migration of Derivatives to Optiq.

**The existing maturities of the daily and weekly contracts that are being merged will trade until their scheduled last trading dates, and will expire in business as usual mode. Upon their expiration, and following**

the same expiry introduction rules, **the new expiries for the same length of maturity will be introduced under the standard contract.**

Trading characteristics that are the same between Contracts that are being combined are:

- Contract Type
- Exchange Code
- Lot Size
- Trading Currency
- Exercise Style
- Settlement Method
- Optiq Segment

	MERGER OF CONTRACTS IMPLEMENTATION		
	Next EUA	Current EUA	Production
Scope of Contracts	The sub-set of contracts that will be merged in the Test environments is identified in Appendix A.2		The full list of contracts that will be merged in Production are identified in Appendix A.1.
Continuation of short term expiries until merger	Up until August	Up until November	Up until Q1 2020
Start of Merger	<p>In August 2019</p> <p>The Merger of contracts will be performed in batches. Please refer to Appendix A.2 for the batches.</p>	<p>Q4 2019</p> <p>The exact date for the start of merger will be communicated via Optiq Notice.</p>	<p>In Production, the Merger will start at least one month after migration to Optiq is completed.</p> <p>The exact date for the start of merger will be communicated following the completion of the migration to Optiq.</p>
Approach to Merger	<ul style="list-style-type: none"> <li>• Maturities of the contracts being merged will be allowed to expire on the last trading date defined for them.</li> <li>• New maturities are introduced to trading on the day of their first trading day and appear in the standing data file made available for the trading on that day. The new maturities replacing merging ones within the standard, or “main”, contract will be introduced at their expected first day of trading according to the expiry cycle rules.  <i>For example:</i>  <i>A27 daily will expire at the end of trading day on the 27<sup>th</sup> of the month. The next daily for 27<sup>th</sup> of month will be introduced for the last date of this month in the main contract.</i> <ul style="list-style-type: none"> <li>▪ K.O.A27 will expire at the end of 27 January 2020</li> <li>▪ its equivalent in February will be introduced in K.O.AEX on 26 February 2020 with last trading date of 27 February 2020.</li> </ul> </li> <li>• Listing of new maturities under the single contract will be done into existing contracts. No new listings are planned for the merger of contract.</li> <li>• The main trading characteristics of a contract listed above should not change as a result of the merger.</li> </ul>		
Duration	The full merger is estimated to take between 4 and up to 9 weeks after the start of the merger		
Required Actions	<p><u>Roll of Expiries:</u> Clients should adjust strategies for the roll between the currently separate weekly and daily contracts to be under the single “Main” contract.</p> <p><u>Market Maker Protection:</u> Following the listing of individual weekly and daily contracts in the main contract, clients should adjust their Market Maker Protection for it to apply on the corresponding “Main” contract.</p>		

### 4.3 MANAGING ORDER ENTRY AND MARKET DATA SERVICES AND FILES DURING THE MIGRATION

Please find below a summary of how files and services will be provided throughout the migration to Optiq Phase 3.

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#### 4.3.1 Drop Copy

Optiq Drop Copy will be available via dedicated Drop Copy gateways and accesses.

After the migration clients consuming Drop Copy will receive messages via the Optiq Drop Copy, in the FIX format defined for Optiq, using these new accesses that have to be individually requested. Drop Copy is expected to provide messages across Derivatives segments. More details will be available in the future update of the *Euronext Markets – Drop Copy service description* document.

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#### 4.3.2 EOD Application Files

Euronext End of Day (EOD) interface was used as a host for the Member Infrastructure Website Audit (MIW) files that will be decommissioned with the migration of Derivatives markets to Optiq.

Information previously available through these files will be provided through the Optiq Drop Copy.

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#### 4.3.3 Saturn

**SLC & Commodity Position Reporting** services: There is no change to this service with the migration of Derivatives markets to Optiq.

#### **Euronext Regulatory Reporting Solution - Reporting for non-MIFID Euronext Members:**

##### **Trading Venue Transaction Identification Code (TVTIC)**

In Optiq Euronext uses a concatenation of the value of the fields for Execution ID and the ISIN code to generate TVTIC. No padding is applied. Members are required to conduct their own concatenation of the values communicated in the execution and fill messages with the appropriate ISIN code for purposes of compliance with rules set out by MIFID II<sup>1</sup>.

Clients already using the service will need to adjust the fields used for submission of trades to Saturn to be in line with the order entry protocol in Optiq.

The field for trade execution ID in UTP-D is *TradeID* (tag 1003). With migration to Optiq clients must use the fields for execution ID identified below per protocol:

- SBE: *Execution ID*
- FIX: *ExecID* (tag 17)

The execution ID used by Optiq is unique for the MIC and date.

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<sup>1</sup> RTS 6 - Commission Delegated Regulation (EU) 2017/589 of 19 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading & RTS 22 - Commission Delegated Regulation (EU) 2017/590 of 28 July 2016 supplementing Regulation (EU) No 600/2014

*ISIN Code* is the field retrieved from standing data for the associated instrument.

### Strategy Trades

Following migration to Optiq trades reported in Saturn on strategies will follow the same checks as done on trades on the Outrights. I.e. in case a trade reported in Saturn doesn't match the trade in Optiq – this report will be rejected by Saturn.

### Notes on Reporting & Implementation Dates

The changes for submission and validation are not backward or forward compatible. Before the migration clients must use the existing fields / logic for reporting, and after migration must switch to the new one. Otherwise the reported trades will be rejected.

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#### 4.3.4 Central Counterparties & Clearing

Central Counterparties will receive updated information on contracts and tradeable instruments in line with the migration to Optiq.

Clients are advised to consider the following important information related to clearing:

- After the migration of the Derivatives segments to Optiq, all trade messages will use the Trade and Order IDs and Timestamps in the format provided by Optiq, with all Timestamps provided in UTC.
- Following the migration, the order ID used in reconciliation with clearing partners needs to be adjusted. Clients are invited to review guidelines for order ID reconciliation with Central Counterparties provided in the Appendix C of this document.
- To make the migration as smooth as possible, and reduce the possibility of errors post-go live, conformance will include a set of front-to-back trading to clearing tests. A dedicated document will be provided for the front-to-back testing containing:
  - o the set of scenarios required to be done
  - o process by which testing will be done, timelines and points of contact
- To assist clients in front-to-end setup and testing a mapping of clearing-specific fields in Optiq Order Entry and LCH Clearing messages is made available in Appendix B of this document. Clients must correctly populate the clearing fields in the order submission, to ensure correct processing and posting of trades.
- To ensure a smooth roll between the merging expiries, the merger will be done as a separate step as described in the section "Merger of Contracts with Maturities shorter than one month".

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#### 4.3.5 Euronext File Services (EFS)

The files currently provided for Cash markets will not be affected by the migration of the Derivatives markets to Optiq.

For the files provided for the Derivatives markets, details of file and folder changes on EFS are identified in the Change Summary document published on 21 January 2019 for the Change in MDG for new Derivatives Segments, and are also provided in Appendix D at the end of this document.

For more information about new files and concepts, clients should review the *How the Market Works* document.



Information on newly added files, and modification of existing ones, that are made available on EFS is available in the document *Euronext Markets - Optiq File Specifications*.

Find below the list of files available in the EFS at each step of the migration of the Derivatives markets to Optiq.

	OE or Current setup in MDG Production		Production set-up After Segmentation Change	Migrating to Optiq (Target for Go live)
<b>Open Interest File</b>	MDG	One file per Derivatives segment (Commodities, Futures, Options)	One file per segment (Commodities, Equity Derivatives, Index Derivatives, Financial Derivatives)	No Change in location / name
<b>PrevDayCapAndVolTradeFile</b>	MDG	One file per Cash segment	No Change	No Change
<b>Cash Standing Data File</b>	OEG & MDG	One files per Cash segment	No Change	No Change
<b>Derivatives Standing Data File</b>	OEG & MDG	One file per Derivatives segment (Commodities, Futures, Options)	One file per Derivatives segment (Commodities, Equity Derivatives, Index Derivatives, Financial Derivatives)	No Change in location / name Updated with OEG Connectivity data
<b>SBE Templates</b>	OEG & MDG	For Cash: Two files are provided for each segment, one for MDG and one for OEG  For Derivatives: One unique MDG template provided for all segments, in directory "Current"	One file per segment (Commodities, Equity Derivatives, Index Derivatives, Financial Derivatives)	2 SBE templates: one for OEG and one for MDG, split into segments. The templates between segments are the same  Cash and APA do not change (Phase 2)
<b>Time Table file (for Cash)</b>	MDG	One files per Cash segment	File for Cash only	No Change
<b>Time Table file (for Derivatives)</b>	MDG	Not Available	Not Available	New file for Derivatives  One file per segment (Commodities, Equity Derivatives, Index Derivatives, Financial Derivatives)
<b>Cash Tick Size Referential File</b>	MDG	For Cash: One file provided for all segments, in directory "Current"  For Derivatives: One file provided for all	One file for Cash and one file for Derivatives, provided for in directory "Current"	No Change in location / name



	OE or MDG	Current setup in Production	Production set-up After Segmentation Change	Migrating to Optiq (Target for Go live)
		segments, in directory "Current"		
<b>Repo Settlement Price File</b>	MDG	For Cash: One files per Cash segment	No Change	No Change
<b>Reference Spread (APF) file</b>	MDG & OEG	Not Available	Not Available	New file for Derivatives One file per segment (Commodities, Equity Derivatives, Index Derivatives, Financial Derivatives)
<b>Derivatives Tick Size File</b>	MDG & OEG	Not Available	Not Available	New file for Derivatives One file for all Derivative segments, provided for in directory "Current"
<b>TRF Conversion Parameters Files</b>	MDG	Four files provided for segment Futures	Four files provided for segment Index Derivatives	No Change in location The name to be adjusted to Optiq

#### 4.3.6 FIXML files

Following migration of market data to Optiq MDG in Phase 1 for trading on CCG Euronext continued providing standing data in FIXML files.

Following migration for trading to Optiq, via OEGs, these files will be decommissioned, and clients should implement changes in their system to start using the Derivatives Standing Data files, that contain all data required for trading.

Currently the FIXML files are provided in two locations:

1. ftp.data.euronext.com
2. Standing data FTP Servers (Staging server) [156.48.93.155 (via SFTI)]

#### 4.4 TESTING APPROACH AND TEST ENVIRONMENTS

Next EUA is the environment which will be used for end-to-end testing of Optiq and for conformance. **On the test environment, customers are expected to (i) check their connectivity to the OEG, (ii) validate their conformance tests including end-to-end tests all the way to clearing, and (iii) confirm they can manage the merger of contracts with shorter maturities under the main contract.**

The Derivatives markets will be unavailable in Next EUA for four weeks prior to the opening of client testing, in order to secure the quality of the service that will be provided to clients. During this time clients will continue to be able to use Current EUA for their testing of Derivatives markets. Cash markets continue to be available in Next EUA and Current EUA.

The delivery of Optiq Phase 3 in Next EUA will be made in two lots. The first delivery will contain the scope required to perform functional conformance testing. The second delivery will enhance and enrich the platform for customer testing with full expected scope for the Derivatives segments.

Find below the timeline for Next EUA<sup>2</sup> changes for Optiq:

	NEXT EUA CHANGES	
	Availability in Next EUA	Info Flash / Optiq Notice reference
<b>File availability in Target folders on EFS for Market data segmentation change</b> Testing access to files and change in population	6 February 2019 ( <b>COMPLETED</b> )	<a href="#">Info Flash</a> of 21 January 2019
<b>Market data segmentation changes</b> Testing the changes and new SBE templates.	From 20 February 2019 ( <b>COMPLETED</b> )	<a href="#">Info Flash</a> of 21 January 2019
<b>Technical set up of Order Entry</b> For connectivity testing and validation of OE sessions.	May 2019	<a href="#">OEG Connectivity Specifications / Telnet Tests docs</a>
<b>Next EUA testing of Derivatives markets not supported</b> For internal testing purposes, Next EUA's Derivatives markets will be closed.	3 June – 26 June	<a href="#">Optiq Notice</a> of 7 May 2019
<b>First delivery Conformance Scope</b>	26 June 2019	Info-Flash
<b>Testing of Expiry Merger</b> The expiry merge under one contract will apply gradually to a pre-defined set of contracts.	In August	An Optiq Notice will be published. Please refer to Appendix A.2 for list of contracts.
<b>Enhanced Scope Delivery</b>	To be provided	Details of full scope and exact date of delivery to be communicated in due course.

#### 4.4.1 Testing the Market Data Segmentation change (Completed)

Next EUA was upgraded to the new market data segmentation change and customers were able to validate their software and configuration changes in this environment. A test validation form was provided for clients to confirm they were able to accommodate the changes.

All steps of this change have been completed at the identified dates.

#### 4.4.2 Checking Order Entry Connectivity in Next EUA

Euronext will provide Order Entry Sessions for Next EUA to clients' Member Connectivity Administrators and to all providers two weeks before availability of Next EUA. Customers who have not received their Order Entry Sessions for Next EUA are invited to contact Customer Access Services. For more details please see the "Order OEG Logical Accesses" section, and see contact details in the [Support](#) section of this document).

<sup>2</sup> More information on operations in Current EUA (formerly v-EUA) will be provided in a later version of Migration guidelines

Drop Copy sessions will be provided at a later stage.

The *Connectivity Configuration Specifications* has been updated for Phase 3 with full connectivity details for Next EUA.

Clients will be able to perform telnet to the Optiq Next EUA environment prior to opening of Next EUA. Please refer to the OEG Connectivity Specification and Telnet Tests document for more details.

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#### 4.4.2.1 Throttling Testing of Optiq in EUA

For throttling testing dedicated time slots will be set up in the Next EUA environment. Customers will be able to use dedicated Logical Accesses for the throttling tests. These tests will follow the mechanism that will be described in the updated technical documentation for Phase 3 that will be provided in September 2019.

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#### 4.4.3 Validating Conformance Tests

	Provider	Trading member in-house	Member using provider
Functional conformance test	Mandatory	Mandatory	Market makers: Mandatory* Other Members: Highly recommended
High Availability testing	Mandatory	Mandatory	Highly recommended
Performance & Capacity test	Highly recommended**	Highly recommended**	Highly recommended**
Front-to-back testing	N/A	Mandatory	Mandatory

\* Trading members using provider do not have to perform functional conformance unless said member is market making

\*\* Highly recommended. The migration from ITM to Logical Access ID brings significant changes and clients are responsible to test and understand the changes prior to go-live in Production.

The main test environment for Optiq Phase 3 is the Next EUA environment. Conformance scope of software will be made available at the opening of the test platform, enabling customers to start validating their software and to perform their functional and front-to-back Clearing conformance testing.

Conformance testing consists of technical and functional parts:

- **Functional conformance testing** will allow customers to validate the full scope of the Optiq order entry gateway (OEG), taking into account all message types offered in scope of conformance. This testing will be made available across all segments and product types.
- **Technical conformance testing** will present:
  - o Capacity & throttling;
  - o Several different types of failures (High Availability[HA])

*Following the delivery of the full scope of Optiq for Derivatives markets, dedicated time slots will be set up for Technical conformance. A dedicated communication will provide more details and dates for these tests.*

Test scenarios and scripts will be made available for general and specialized (e.g. Market Making) trading functionalities.

Conformance testing will be available in the **Next EUA environment** and customers will need to conform **each of their solutions, for each member code, each protocol and on each authorised Derivatives segment.**

Following delivery of conformance scope customers will be invited to book a conformance test appointment using a conformance form to be made available on the Connect portal.

Please note that customers will need to fill in the conformance booking form at least 48 hours prior to the desired timeslot. No conformance test will take place on Wednesday morning as the Next EUA platform is closed for maintenance.

Please note that:

- Customers will not be able to access the Production environment for the Dress Rehearsal or Go-live unless they have completed their **functional conformance tests** on the relevant segments;
- Customers will not be able to access the Production environment for Go-Live unless they have completed their **functional and technical conformance tests**.

All conformance information, including conformance scripts and conformance guidelines documents will be communicated in due course, and will be made available on the Euronext Optiq page.

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#### 4.4.4 Front-to-back Clearing Testing

The migration to Optiq brings with it a large number of changes impacting the post trade systems of Clearing Members, in reconciliation with client back-offices. Clients are strongly encouraged to review the information that is included in the appendices of this document, as well as dedicated communication for the clearing impacts, and to ensure that their systems use the correct mapping of values and instructions for clearing data.

As a result, a part of the mandatory testing for Phase 3 will be dedicated to **front-to-back testing**.

These tests will allow to confirm that the mapping of fields and the associated configured values from Order Entry to posting in clearing accounts is correctly populated by the clients' trading facing systems, clearing members and back-offices.

When performing the Front-to-back clearing conformance test, the Trading member is responsible to confirm with their Clearing member that mapping is as expected.

	Trading Member developer	Member developer + using a provider	Market Makers using a provider only	Trading Member using a provider only	Provider
Mandatory / optional	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory**

**\*\* For providers that are hosting multiple trading members, each trading member must pass the front-to-back tests.**

Clearing testing must be completed by each individual trading firm, identified by a Firm ID (a.k.a. Member code / TMF) to ensure their account and configuration setup is correct.

As mentioned in section “Central Counterparties & Clearing” a dedicated document will be published with more details on these tests.

The main test environment for Optiq Phase 3 is the **Next EUA environment**. The timing from which the Front-to-back testing can commence will be provided in due time.

Access to LCH in Euronext’s test environment will be in Next EUA during the Optiq programme test period.

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#### **4.4.5 High Availability Testing of Optiq in EUA**

Following the delivery of the full scope of Optiq for Derivatives markets, dedicated time slots will be set up for High Availability (HA) tests in the Next EUA environment. These HA tests will follow the mechanism that will be described in the *Optiq High Availability & Business Continuity Functional Overview*. The overview for Derivatives markets in Phase 3 will be provided in due time.

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#### **4.4.6 Confirming the Ability to Manage the Merger of Contracts with Shorter Expiries under one Contract**

Following introduction of new shorter maturities under the main contract clients will be able to confirm that they can:

- Use strategies for the roll between maturities (e.g. weekly to monthly) - for all accesses
- Submit / use Market Maker Protection for the single main contract under which the different maturities have been gathered – for market making accesses

The sub-set of contracts that will be merged in the Test environment is identified in Appendix A.2 (two batches).

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#### **4.4.7 Optional Testing of Optiq in Current EUA**

Approximately two to four weeks before the migration of Derivatives segments to Optiq in Production, the Current External User Acceptance environment (v-EUA) will be upgraded to be in line with full scope of Phase 3, and will be used to practice the migration steps planned for Production. This includes the purge of the order book and the change of SBE templates for OEG and MDG.

Euronext will provide dedicated accesses to the Current EUA to members and their providers. The details of the accesses will be provided at the same time as for Next EUA.

Please note that:

- Cash segments in Next and Current EUA environments will not be impacted by the migration of the Derivatives markets to Optiq.
- The main test environment for the customers to use for Derivatives Markets migration (Phase 3) remains the Next EUA throughout the Optiq programme.

## 4.5 CUSTOMER READINESS CHECKLIST

The actions required of customers before Go Live are listed in the table below.

The dates that are provided as quarters of 2019 will be further clarified in a future update of the migration guidelines.

	CUSTOMER READINESS CHECKLIST			
	Availability in EUA	Availability in Production	Deadline	Relevant documentation
<b>Adapt to market data segmentation change</b> <i>Trading Member developers and Providers, including Data Vendors</i> Includes updates to the MDG SBE template. Testing in Next EUA. <a href="#">[Mandatory]</a>	20 February 2019 <b>(COMPLETED)</b>	29 April 2019 <b>(COMPLETED)</b>	N/A	<a href="#">InfoFlash</a>
<b>Sign the TPAA</b> <i>Trading Members</i> Required of Trading Members to use Optiq in Production <a href="#">[Mandatory for Clients that have not yet signed the TPAA]</a>	N/A	N/A	15 May 2019	TPAA provided by <a href="#">Euronext Membership</a>
<b>Develop and test</b> <i>Trading Member developers and Providers</i> For order entry and market data software in Next EUA <a href="#">[Mandatory]</a>	26 June 2019	N/A	First Dress Rehearsal	<a href="#">Optiq documentation</a>
<b>Manage new SBE templates for Phase 3</b> <i>Trading Member developers and Providers</i> New SBE order entry and change in SBE for market data per segment <a href="#">[Mandatory]</a>	26 June 2019	Q4 2019		<a href="#">Optiq documentation</a>
<b>Validate Functional conformance test</b> <i>Trading Member developers and Providers</i> Functional conformance <a href="#">[Mandatory]</a>	mid-July 2019	N/A	First Dress Rehearsal	<a href="#">Conformance guidelines</a> <a href="#">Conformance scripts</a>
<b>Validate Front-to-back conformance test</b> <a href="#">[Mandatory]</a>	From July 2019	N/A	First Dress Rehearsal	Test procedures will be published
<b>Validate Technical conformance tests</b> Throttling, High Availability <a href="#">[Highly recommended]</a>	From October 2019	N/A	First Dress Rehearsal	Test procedures will be published

	CUSTOMER READINESS CHECKLIST			
	Availability in EUA	Availability in Production	Deadline	Relevant documentation
<b>Configure network</b> <i>Trading Members, ASPs and ESPs</i> Update connectivity and perform telnet tests <a href="#">[Mandatory]</a>	22 May 2019	22 May 2019	First Dress Rehearsal	<a href="#">OEG Connectivity Specifications</a>  <a href="#">Telnet Tests guidelines</a>
<b>Order OE sessions</b> <i>Trading Members</i> Will be provided for Next EUA; to be ordered for Production; required for dress rehearsal <a href="#">[Mandatory]</a>	July 2019	Order forms must be submitted at the latest one week before Dress Rehearsal	First Dress Rehearsal	Logical Access order form for <a href="#">EUA</a>  <a href="#">Production</a>
<b>Participate in a Dress Rehearsal</b> <i>Trading Members via in-house and/or Provider solutions</i> Validate technical and functional access to Production <a href="#">[Mandatory]</a>	N/A	Saturday 19 October 2019  Saturday 9 November 2019	N/A	Detailed dress rehearsal guidelines will be published in due course
<b>Test final set-up on the Go Live week-end</b> <i>Trading Members via in-house and/or Provider solutions</i> Validate technical and functional access before the market segment migrates to Optiq <a href="#">[Highly recommended]</a>	N/A	23 November 2019	N/A	Further information will be provided
<b>Confirm ability to manage the merger of contract expiries</b> <i>Trading Members and Providers</i> Validate the merge of expiries under one contract in Next EUA before it is implemented approximately 1 month after Optiq Go Live.	from August 2019	~1 month after Go Live	~8 weeks after Go Live	Further information will be provided

## 4.6 PRODUCTION ENVIRONMENT

The Production environment will be upgraded to Optiq Phase 3 which will replace UTP on Derivatives Markets.

**On the Production environment, customers are expected to (i) test order entry connectivity to Production, (ii) order new order entry sessions to access Production, and (iii) validate their access and software in a mandatory Dress Rehearsal.**

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### 4.6.1 Testing Order Entry Connectivity to Production and the Disaster Recovery Environments

The Production and Disaster Recovery environments will be opened ahead of migration of Derivatives markets to Optiq in Production for Telnet connectivity testing. Please refer to Euronext Markets – Optiq OEG Connectivity Specifications and the Telnet testing guidelines for more information.

Technical connectivity testing does not require any specific connectivity setup (i.e. Logical Access information) as it covers generic telnet testing.

Telnet connectivity tests will be available for Logical and Drop Copy access in the Production and Disaster Recovery environments. Customers are required to perform Telnet commands in order for Euronext to receive network validation of the connectivity.

The start dates and timeframes for OEG and Drop copy connectivity testing in Production and DR is mentioned inside the *Euronext Markets – Optiq Phase 3 Production Connectivity Telnet Tests* document.

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### 4.6.2 Dress Rehearsals

The mandatory Dress Rehearsals will take place before Go Live, allowing customers to test the target Production implementation of OEG and MDG for Derivatives markets in advance. **Customers will not be authorised to take part in the Dress Rehearsal week-end unless they have (i) validated their conformance test, (ii) confirmed Telnet connectivity to Production and (iii) ordered their OE Sessions for Production.**

The scope of the tests are the following:

- Optiq Order Entry and Market Data Phase 3 for Derivatives markets
- The schedule and scope of Dress Rehearsals will be communicated at a later date in a dedicated document

Tests which are out of scope are the following:

- LCH tests
- Functional high availability
- Cash markets
- Saturn
- Drop Copy

Customers will be expected to conduct the following tests:

- Secure network resources to validate firewall / security path



- Connect to the Production environment
- Inject orders
- Purge the book at the end of the day and restore order book to Friday night
- Validate participation at the end of the day via a webform

The roll-back to CCG / UTP after each dress rehearsal should be managed by the participants of each test to ensure a smooth start-up on the next trading day. **All clients are required to participate in at least one Saturday dress rehearsal prior to Go Live.** Participation in the migration week-end is highly recommended.

**On the Saturday before go-live**, clients will be invited to connect to the Optiq OEG, as well as to the MDG multicast channels that will be implemented in Production on the next trading day.

Once the Go-Live is confirmed, clients will keep the configuration in place and will **not** perform a roll-back in order to begin trading using Optiq OEG and MDG on the following Monday. Clients will need to ensure that they have purged their systems of the orders placed during the Saturday tests.

A detailed description of the dress rehearsals, go-live organization, disaster recovery testing and test scenarios will be provided in due course.

## 5. EURONEXT MEMBERSHIP AND CONNECTIVITY APPROACH DURING THE MIGRATION PERIOD

Please note that the following processes are in place during the Optiq Phase 3 migration period.

**Customers are required to sign the Trading Platform Access Agreement (TPAA) prior to trading on Euronext Markets on Optiq.**

- Customers who signed the TPAA for the Cash markets will not be required to sign a new agreement for the Derivatives markets.
- Customers who have not yet signed the TPAA must sign it to be able to trade on the Euronext Derivatives Markets on Optiq.

Customers will be able to order ITMs on UTP-D during the Optiq testing phase and up to 2 weeks before the migration.

Any applications for membership received within 8 weeks before migration in Production, will be able to start trading only with go live of Optiq, and will be required to complete their conformance tests with Optiq. Given the fact that Next EUA will be the testing environment for Optiq, customers need to be aware that testing on UTP-D for new membership will have to be conducted in Current EUA. From 8 weeks before Go Live, it is recommended that customers develop their systems to match Optiq rather than UTP-Derivatives.

The following table lists the dates for membership and Optiq connectivity milestones that clients need to take into consideration:

	Membership and Connectivity to Euronext markets		
	Next EUA availability	Current EUA availability	Production availability
<b>New Cash markets membership</b> New legal entity or member code, including new clearing member	At all times	At all times	At all times
<b>New Derivatives markets membership for use on UTP-D</b> New legal entity or member code, including new clearing member	Until 3 June 2019	Available until end of Q3 2019	Available until end of Q3 2019
<b>New Derivatives markets membership for use on Optiq</b> New legal entity or member code, including new clearing member	From 26 June 2019	Available from end of Q3 2019	From 25 November 2019
<b>Sign the TPAA (if not yet signed)</b> <i>Trading Members</i> Required of Trading Members to use Optiq in Production	N/A	N/A	15 May 2019
<b>New UTP ITMs on Derivatives markets</b>	N/A	Available until end of Q3 2019	Available up until 2 weeks before migration to Optiq
<b>New Optiq Logical Access on Derivatives markets</b>	26 June 2019	In Q3 2019	In Q3 2019
<b>New Optiq Logical Access on Cash markets</b>	At all times	At all times	At all times

## 6. COMMUNICATION PLAN

A strong focus on communication will continue throughout the Optiq migration, in order to ensure that all clients have access to clear and useful information for the duration of the programme. The following list of communication methods will be used to convey key details and clients should be sure to subscribe to any relevant distribution lists.

A dedicated Optiq contact registration form is available on the Optiq website, allowing customers to register as key entry points for all information relating to the Optiq Programme. The objectives of this form are:

- To provide to the Optiq teams the necessary information related to customers organisation and development for Optiq Phase 3 Derivatives migration,
- Make sure that all relevant IT and business contacts receive the dedicated Optiq Derivatives communications

The form is available [here](#) and we invite all customers to complete registration.

- **Optiq Website:** a dedicated section of the Euronext website has been created for Optiq, and includes key information on the migration, as well as an exhaustive repertoire of all Optiq communications and documentation published. <https://www.euronext.com/optiq>
- **Info Flashes:** These communications will announce key milestones of the project, and details that all clients should be aware of, such as: documentation publication, the opening of each platform, and confirmed Production implementation dates.
- **Optiq Newsletters:** the newsletters are particularly useful as they provide a single point of reference for key programme milestones, further details on Optiq planning, platform & connectivity, as well as high-level functionality overviews. All clients are encouraged to subscribe to and read each monthly newsletter.
- **Optiq Notices:** The Optiq support desk will provide programme updates via 'Optiq Notices' to inform the market of milestones, EUA environment details, Optiq specifications, issue reminders of deadlines, changes and testing, as well as other important programme updates.
- **Technical & Functional Documentation:** new and updated documentation will be published throughout the course of the migration, and will provide clients with the required information to develop and implement Optiq Phase 3.
- **Bilateral Meetings:** Optiq Client Readiness team representatives will meet with clients during the steps of migration, to hold dep-dive sessions, provide regular updates on the program, as well as cover topics like impact assessment, readiness updates, connectivity on-boarding and escalations.
- **Regional Info Sessions & Workshops:** Information sessions & workshops will be organized in the various Euronext locations and will provide an opportunity to learn about the latest updates on the Optiq migration programme and to catch up with fellow market participants. The sessions are open to all members and technology providers.
- **Monthly Readiness Calls:** Answering market participants' questions in monthly calls. Participants wishing to participate in the monthly calls should register using the designated web form, here: <https://connect2.euronext.com/en/form/optiq-survey>

Note: to subscribe to any of the communications please contact [optiq@euronext.com](mailto:optiq@euronext.com)

## 7. DOCUMENTATION

This section outlines various documents that will be made available to clients and the means to retrieve them from a Euronext website. These documents are published to allow clients to do the necessary development and setup for migration of Derivatives markets to Optiq.

The documents listed below are available for Phase 3, with the latest version applicable to Phase 3 indicated, where applicable:

- Euronext Derivatives: How the Market Works <sup>[v2.0]</sup>
- Euronext Markets – Optiq File Specification (first update for Phase 3) <sup>[v3.0.1]</sup>
  - ◆ *TRF Conversion Parameters Files Specifications (to be incorporated into the Optiq File specifications in a future update of the specifications)*
- Euronext Markets – Optiq MDG Client Specifications (first update for Phase 3) <sup>[v3.0.1]</sup>
- Euronext Markets – OEG Client Specifications – SBE Interface <sup>[v2.0.0]</sup>
- Euronext Markets – OEG Client Specifications – FIX 5.0 Interface <sup>[v2.0.0]</sup>
- Euronext Derivatives Market – Optiq Kinematics Specifications <sup>[v1.0.1]</sup>
- MDG SBE Template file (first update for Phase 3) <sup>[v200]</sup>
- OEG SBE Template file (first update for Phase 3) <sup>[v200]</sup>
- Euronext Markets – Optiq SBE Template Policy for the Migration of Derivatives Markets
- Euronext Markets – Optiq & TCS Error List
- Euronext Markets – Optiq OEG Connectivity Configuration specifications (updated for Phase 3) <sup>[v2.1.0]</sup>
- Euronext Optiq Market Data Gateway External User acceptance Environment <sup>[v2.1]</sup>
- Euronext Optiq Market Data Gateway Production Environment <sup>[v2.2]</sup>
- Euronext Markets – Optiq Phase 3 Production Connectivity Telnet Tests <sup>[v1.0]</sup>
- Optiq Euronext File Services (EFS) User Guide
- Optiq Phase 3 Tick Size Summary
- Optiq Phase 3 Derivatives Spread Classes
- Optiq Phase 3 Trading Schedule Summary

In the coming months the following technical & functional documentation will be published for Phase 3:

- Euronext Markets – Drop Copy service description
- Euronext Markets – Optiq OEG Throttling Mechanism v2.2

Clients are advised to also refer to the Euronext Rules and Regulations documents for further details. For the latest version of documentation please visit <http://www.euronext.com/optiq/documentation>.

## 8. SUPPORT

A Support Desk dedicated to the Optiq programme was launched in June 2016. The Support desk is and will be available to customers for the duration of the Optiq implementation programme. It has been set up to answer customers' queries related to the Optiq programme, to send information to customers related to Optiq, to assist customers in their testing and validation on the EUA environment, and to provide follow-up on client conformance testing.

The Optiq Support Desk has been set up to ensure customer readiness and will be the primary point of contact for clients throughout the migration. The scope of the Support Desk will include:

- Answering customer queries about the Optiq programme, such as technical and functional questions, clarifications on the specifications and documentation, questions relative to the migration and associated dates, and questions regarding connectivity.
- Sending information about Optiq to customers, such as the monthly newsletters, regular technical notes, programme Info Flashes and updates to the dedicated Optiq web page.
- Assisting customers in their testing and validation on EUA environment by generating test orders, trades and market data, matching client orders upon request, and facilitating testing on the platform by creating Production-like conditions.
- Coordination and follow-up on customer conformance testing by ensuring that clients have made the required developments for the new Optiq platform and providing support during the conformance testing periods.

In addition, the Membership team is available to answer customers' queries related to the TPAA.

Finally, the Customer Access Services team is available to manage queries related to their access to Optiq in Next EUA, Current EUA and Production.

Find below the contact details of Euronext's support teams:

Team	Contact details
<b>Optiq Support Desk</b> Members' first point of contact for Optiq Phase 3 Technical & functional assistance with the development and testing on Optiq. Assistance with the use of the EUA environment, conformances, timeline and customer readiness checklist.	<ul style="list-style-type: none"> <li>■ Tel: +33 1 70 48 25 55</li> <li>■ Email: <a href="mailto:optiq@euronext.com">optiq@euronext.com</a></li> </ul>
<b>Operational Client Services</b> Contact the Operational Client Services Desk for all operational queries and support requests:	<ul style="list-style-type: none"> <li>■ Tel: +33 1 85 14 85 85</li> <li>■ Email: <a href="mailto:clientsupport@euronext.com">clientsupport@euronext.com</a></li> </ul>
<b>Membership</b> Support to new and existing members with the onboarding process for becoming a trading member, including contracts (TPAA).	<ul style="list-style-type: none"> <li>■ Tel: +31 207 214 264</li> <li>■ Email: <a href="mailto:EuronextMembership@euronext.com">EuronextMembership@euronext.com</a></li> </ul>
<b>Customer Access Services</b> Support to market participants' access and connections to Euronext markets, including ITMs on UTP, Logical Accesses on Optiq (i.e. access and log-in credentials to Optiq OEG).	<ul style="list-style-type: none"> <li>■ Tel: +33 1 85 14 85 89</li> <li>■ Email: <a href="mailto:CAS@euronext.com">CAS@euronext.com</a></li> </ul>



## 9. APPENDIX

### 9.1 APPENDIX A.1: CONTRACTS FOR MERGER IN PRODUCTION

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
<b>A</b>	<b>O</b>	<b>EUE</b>	<b>EUE-St Opt</b>	<b>EUE</b>	<b>Main</b>	<b>N/A</b>
A	O	5EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	4EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	2EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	1EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
<b>A</b>	<b>O</b>	<b>HEI</b>	<b>HEINEKEN</b>	<b>HEI</b>	<b>Main</b>	<b>N/A</b>
A	O	5HE	Heineken NV - Weekly	HEI	Merging into Main	A.O.HEI
A	O	4HE	Heineken NV - Weekly	HEI	Merging into Main	A.O.HEI
A	O	2HE	Heineken NV - Weekly	HEI	Merging into Main	A.O.HEI
A	O	1HE	Heineken NV - Weekly	HEI	Merging into Main	A.O.HEI
<b>A</b>	<b>O</b>	<b>IME</b>	<b>IME-St Opt</b>	<b>IME</b>	<b>Main</b>	<b>N/A</b>
A	O	5IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	4IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	2IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	1IC	IME - Weekly	IME	Merging into Main	A.O.IME
<b>A</b>	<b>O</b>	<b>ING</b>	<b>ING</b>	<b>ING</b>	<b>Main</b>	<b>N/A</b>
A	O	5IN	ING Groep Weekly Opt	ING	Merging into Main	A.O.ING
A	O	4IN	ING Groep Weekly Opt	ING	Merging into Main	A.O.ING
A	O	2IN	ING Groep Weekly Opt	ING	Merging into Main	A.O.ING
A	O	1IN	ING Groep Weekly Opt	ING	Merging into Main	A.O.ING
<b>A</b>	<b>O</b>	<b>IEM</b>	<b>IEM-St Opt</b>	<b>IEM</b>	<b>Main</b>	<b>N/A</b>
A	O	5IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	4IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	2IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	1IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
<b>A</b>	<b>O</b>	<b>UN</b>	<b>UNILEVER</b>	<b>UN</b>	<b>Main</b>	<b>N/A</b>
A	O	5UN	Unilever NV - Weekly	UN	Merging into Main	A.O.UN
A	O	4UN	Unilever NV - Weekly	UN	Merging into Main	A.O.UN
A	O	2UN	Unilever NV - Weekly	UN	Merging into Main	A.O.UN
A	O	1UN	Unilever NV - Weekly	UN	Merging into Main	A.O.UN
<b>A</b>	<b>O</b>	<b>TTM</b>	<b>Tom Tom Individual E</b>	<b>TTM</b>	<b>Main</b>	<b>N/A</b>
A	O	5TT	TomTom Weekly	TTM	Merging into Main	A.O.TTM
A	O	4TT	TomTom Weekly	TTM	Merging into Main	A.O.TTM
A	O	2TT	TomTom Weekly	TTM	Merging into Main	A.O.TTM
A	O	1TT	TomTom Weekly	TTM	Merging into Main	A.O.TTM
<b>A</b>	<b>O</b>	<b>IJP</b>	<b>IJP-St Opt</b>	<b>IJP</b>	<b>Main</b>	<b>N/A</b>
A	O	5IJ	IJP - Weekly	IJP	Merging into Main	A.O.IJP
A	O	4IJ	IJP - Weekly	IJP	Merging into Main	A.O.IJP
A	O	2IJ	IJP - Weekly	IJP	Merging into Main	A.O.IJP
A	O	1IJ	IJP - Weekly	IJP	Merging into Main	A.O.IJP
<b>A</b>	<b>O</b>	<b>IWR</b>	<b>IWR-St Opt</b>	<b>IWR</b>	<b>Main</b>	<b>N/A</b>
A	O	5IW	IWR - Weekly	IWR	Merging into Main	A.O.IWR
A	O	4IW	IWR - Weekly	IWR	Merging into Main	A.O.IWR
A	O	2IW	IWR - Weekly	IWR	Merging into Main	A.O.IWR
A	O	1IW	IWR - Weekly	IWR	Merging into Main	A.O.IWR
<b>A</b>	<b>O</b>	<b>ISS</b>	<b>ISS-St Opt</b>	<b>ISS</b>	<b>Main</b>	<b>N/A</b>
A	O	5IS	ISS - Weekly	ISS	Merging into Main	A.O.ISS
A	O	4IS	ISS - Weekly	ISS	Merging into Main	A.O.ISS

*Euronext Optiq Phase 3: Derivatives Markets - Order Entry Gateway (OEG), Matching Engine (ME) and Market Data Gateway (MDG) Migration Guidelines*

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
A	O	2IS	ISS - Weekly	ISS	Merging into Main	A.O.ISS
A	O	1IS	ISS - Weekly	ISS	Merging into Main	A.O.ISS
<b>A</b>	<b>O</b>	<b>ISF</b>	<b>ISF-St Opt</b>	<b>ISF</b>	<b>Main</b>	<b>N/A</b>
A	O	5IZ	ISF - Weekly	ISF	Merging into Main	A.O.ISF
A	O	4IZ	ISF - Weekly	ISF	Merging into Main	A.O.ISF
A	O	2IZ	ISF - Weekly	ISF	Merging into Main	A.O.ISF
A	O	1IZ	ISF - Weekly	ISF	Merging into Main	A.O.ISF
<b>A</b>	<b>O</b>	<b>MT</b>	<b>Arcelor Mittal</b>	<b>MT</b>	<b>Main</b>	<b>N/A</b>
A	O	5MT	ArcelorMittal Weekly	MT	Merging into Main	A.O.MT
A	O	4MT	ArcelorMittal Weekly	MT	Merging into Main	A.O.MT
A	O	2MT	ArcelorMittal Weekly	MT	Merging into Main	A.O.MT
A	O	1MT	ArcelorMittal Weekly	MT	Merging into Main	A.O.MT
<b>A</b>	<b>O</b>	<b>PHI</b>	<b>Philips NV Koninklij</b>	<b>PHI</b>	<b>Main</b>	<b>N/A</b>
A	O	5PH	Philips NV Koninklij	PHI	Merging into Main	A.O.PHI
A	O	4PH	Philips NV Koninklij	PHI	Merging into Main	A.O.PHI
A	O	2PH	Philips NV Koninklij	PHI	Merging into Main	A.O.PHI
A	O	1PH	Philips NV Koninklij	PHI	Merging into Main	A.O.PHI
<b>A</b>	<b>O</b>	<b>RD</b>	<b>Royal Dutch Shell 'A</b>	<b>RD</b>	<b>Main</b>	<b>N/A</b>
A	O	5RD	Royal Dutch Weekly O	RD	Merging into Main	A.O.RD
A	O	4RD	Royal Dutch Weekly O	RD	Merging into Main	A.O.RD
A	O	2RD	Royal Dutch Weekly O	RD	Merging into Main	A.O.RD
A	O	1RD	Royal Dutch Weekly O	RD	Merging into Main	A.O.RD
<b>A</b>	<b>O</b>	<b>SBM</b>	<b>SBM Offshore NV</b>	<b>SBM</b>	<b>Main</b>	<b>N/A</b>
A	O	5SB	SBM Offshore NV - We	SBM	Merging into Main	A.O.SBM
A	O	4SB	SBM Offshore NV - We	SBM	Merging into Main	A.O.SBM
A	O	2SB	SBM Offshore NV - We	SBM	Merging into Main	A.O.SBM
A	O	1SB	SBM Offshore NV - We	SBM	Merging into Main	A.O.SBM
<b>A</b>	<b>O</b>	<b>AFA</b>	<b>Air France-KLM</b>	<b>AFA</b>	<b>Main</b>	<b>N/A</b>
A	O	1AF	AirFrance-KLM-Weekly	AFA	Merging into Main	A.O.AFA
A	O	2AF	AirFrance-KLM-Weekly	AFA	Merging into Main	A.O.AFA
A	O	4AF	AirFrance-KLM-Weekly	AFA	Merging into Main	A.O.AFA
A	O	5AF	AirFrance-KLM-Weekly	AFA	Merging into Main	A.O.AFA
<b>A</b>	<b>O</b>	<b>AGN</b>	<b>AEGON</b>	<b>AGN</b>	<b>Main</b>	<b>N/A</b>
A	O	5AG	AEGON Weekly Option	AGN	Merging into Main	A.O.AGN
A	O	4AG	AEGON Weekly Option	AGN	Merging into Main	A.O.AGN
A	O	2AG	AEGON Weekly Option	AGN	Merging into Main	A.O.AGN
A	O	1AG	AEGON Weekly Option	AGN	Merging into Main	A.O.AGN
<b>A</b>	<b>O</b>	<b>AH</b>	<b>Ahold Delhaize, Kon</b>	<b>AH</b>	<b>Main</b>	<b>N/A</b>
A	O	5AH	Ahold Delhaize, Kon	AH	Merging into Main	A.O.AH
A	O	4AH	Ahold Delhaize, Kon	AH	Merging into Main	A.O.AH
A	O	2AH	Ahold Delhaize, Kon	AH	Merging into Main	A.O.AH
A	O	1AH	Ahold Delhaize, Kon	AH	Merging into Main	A.O.AH
<b>A</b>	<b>O</b>	<b>AKZ</b>	<b>AKZO NOBEL</b>	<b>AKZ</b>	<b>Main</b>	<b>N/A</b>
A	O	5AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	4AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	2AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	1AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
<b>A</b>	<b>O</b>	<b>ASL</b>	<b>ASML Holding NV</b>	<b>ASL</b>	<b>Main</b>	<b>N/A</b>
A	O	5AS	ASML Holding NV - We	ASL	Merging into Main	A.O.ASL
A	O	4AS	ASML Holding NV - We	ASL	Merging into Main	A.O.ASL
A	O	2AS	ASML Holding NV - We	ASL	Merging into Main	A.O.ASL
A	O	1AS	ASML Holding NV - We	ASL	Merging into Main	A.O.ASL
<b>A</b>	<b>O</b>	<b>DSM</b>	<b>Koninklijke DSM N.V</b>	<b>DSM</b>	<b>Main</b>	<b>N/A</b>
A	O	5DS	DSM NV, Koninklijke	DSM	Merging into Main	A.O.DSM



*Euronext Optiq Phase 3: Derivatives Markets - Order Entry Gateway (OEG), Matching Engine (ME) and Market Data Gateway (MDG) Migration Guidelines*

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
A	O	4DS	DSM NV, Koninklijke	DSM	Merging into Main	A.O.DSM
A	O	2DS	DSM NV, Koninklijke	DSM	Merging into Main	A.O.DSM
A	O	1DS	DSM NV, Koninklijke	DSM	Merging into Main	A.O.DSM
<b>A</b>	<b>O</b>	<b>ABN</b>	<b>ABN AMRO-St Opt</b>	<b>ABN</b>	<b>Main</b>	<b>N/A</b>
A	O	5AB	ABN AMRO - Weekly	ABN	Merging into Main	A.O.ABN
A	O	4AB	ABN AMRO - Weekly	ABN	Merging into Main	A.O.ABN
A	O	2AB	ABN AMRO - Weekly	ABN	Merging into Main	A.O.ABN
A	O	1AB	ABN AMRO - Weekly	ABN	Merging into Main	A.O.ABN
<b>K</b>	<b>F</b>	<b>FTI</b>	<b>FUTURE AEX INDEX</b>	<b>AEX</b>	<b>Main</b>	<b>N/A</b>
K	F	5FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	4FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	2FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	1FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
<b>K</b>	<b>O</b>	<b>AEX</b>	<b>AEX-INDEX</b>	<b>AEX</b>	<b>Main</b>	<b>N/A</b>
K	O	AX5	AEX Weekly - 5th Fri	AEX	Merging into Main	K.O.AEX
K	O	AX4	AEX Weekly - 4th Fri	AEX	Merging into Main	K.O.AEX
K	O	AX2	AEX Weekly - 2nd Fri	AEX	Merging into Main	K.O.AEX
K	O	AX1	AEX Weekly - 1st Fri	AEX	Merging into Main	K.O.AEX
K	O	A9	AEX Daily Option - 9	AEX	Merging into Main	K.O.AEX
K	O	A8	AEX Daily Option - 8	AEX	Merging into Main	K.O.AEX
K	O	A7	AEX Daily Option - 7	AEX	Merging into Main	K.O.AEX
K	O	A6	AEX Daily Option - 6	AEX	Merging into Main	K.O.AEX
K	O	A5	AEX Daily Option - 5	AEX	Merging into Main	K.O.AEX
K	O	A4	AEX Daily Option - 4	AEX	Merging into Main	K.O.AEX
K	O	A31	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A30	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A3	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A29	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A28	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A27	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A26	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A25	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A24	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A23	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A22	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A21	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A20	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A2	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A19	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A18	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A17	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A16	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A15	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A14	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A13	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A12	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A11	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A10	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A1	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
<b>B</b>	<b>O</b>	<b>GLS</b>	<b>Galapagos NV Stnd Op</b>	<b>GAH</b>	<b>Main</b>	<b>N/A</b>
B	O	1GS	Galapagos-Weekly	GAH	Merging into Main	B.O.GLS
B	O	2GS	Galapagos-Weekly	GAH	Merging into Main	B.O.GLS
B	O	4GS	Galapagos-Weekly	GAH	Merging into Main	B.O.GLS
B	O	5GS	Galapagos-Weekly	GAH	Merging into Main	B.O.GLS

*Euronext Optiq Phase 3: Derivatives Markets - Order Entry Gateway (OEG), Matching Engine (ME) and Market Data Gateway (MDG) Migration Guidelines*

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
<b>B</b>	<b>O</b>	<b>KBC</b>	<b>KBC Groep NV</b>	<b>KBC</b>	<b>Main</b>	<b>N/A</b>
B	O	5KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	4KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	2KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	1KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
<b>B</b>	<b>O</b>	<b>INT</b>	<b>Anheuser- Busch InBe</b>	<b>INT</b>	<b>Main</b>	<b>N/A</b>
B	O	5IT	AB InBev - Weekly	INT	Merging into Main	B.O.INT
B	O	4IT	AB InBev - Weekly	INT	Merging into Main	B.O.INT
B	O	2IT	AB InBev - Weekly	INT	Merging into Main	B.O.INT
B	O	1IT	AB InBev - Weekly	INT	Merging into Main	B.O.INT
<b>B</b>	<b>O</b>	<b>UCB</b>	<b>UCB</b>	<b>UCB</b>	<b>Main</b>	<b>N/A</b>
B	O	5UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	4UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	2UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	1UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
<b>J</b>	<b>O</b>	<b>PXA</b>	<b>CAC 40 Index Option*</b>	<b>PX1</b>	<b>Main</b>	<b>N/A</b>
J	O	5PX	CAC 40 - Weekly	PX1	Merging into Main	J.O.PXA
J	O	4PX	CAC 40 - Weekly	PX1	Merging into Main	J.O.PXA
J	O	2PX	CAC 40 - Weekly	PX1	Merging into Main	J.O.PXA
J	O	1PX	CAC 40 - Weekly	PX1	Merging into Main	J.O.PXA
<b>J</b>	<b>F</b>	<b>FCE</b>	<b>CAC 40 Index</b>	<b>PX1</b>	<b>Main</b>	<b>N/A</b>
J	F	5FC	CAC 40 Index Weekly	PX1	Merging into Main	J.F.FCE
J	F	4FC	CAC 40 Index Weekly	PX1	Merging into Main	J.F.FCE
J	F	2FC	CAC 40 Index Weekly	PX1	Merging into Main	J.F.FCE
J	F	1FC	CAC 40 Index Weekly	PX1	Merging into Main	J.F.FCE
<b>P</b>	<b>O</b>	<b>BN1</b>	<b>BNP Paribas (100)</b>	<b>BNP</b>	<b>Main</b>	<b>N/A</b>
P	O	5BN	BNP Paribas - Weekly	BNP	Merging into Main	P.O.BN1
P	O	4BN	BNP Paribas - Weekly	BNP	Merging into Main	P.O.BN1
P	O	2BN	BNP Paribas - Weekly	BNP	Merging into Main	P.O.BN1
P	O	1BN	BNP Paribas - Weekly	BNP	Merging into Main	P.O.BN1
<b>P</b>	<b>O</b>	<b>CA1</b>	<b>Carrefour SA (100)</b>	<b>CA</b>	<b>Main</b>	<b>N/A</b>
P	O	5CA	Carrefour-Weekly	CA	Merging into Main	P.O.CA1
P	O	4CA	Carrefour-Weekly	CA	Merging into Main	P.O.CA1
P	O	2CA	Carrefour-Weekly	CA	Merging into Main	P.O.CA1
P	O	1CA	Carrefour-Weekly	CA	Merging into Main	P.O.CA1
<b>P</b>	<b>O</b>	<b>CP1</b>	<b>Cap Gemini (100)</b>	<b>CAP</b>	<b>Main</b>	<b>N/A</b>
P	O	5CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	4CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	2CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	1CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
<b>P</b>	<b>O</b>	<b>CS1</b>	<b>Axa (100)</b>	<b>CS</b>	<b>Main</b>	<b>N/A</b>
P	O	5CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	4CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	2CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	1CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
<b>P</b>	<b>O</b>	<b>DA1</b>	<b>Danone (100)</b>	<b>BN</b>	<b>Main</b>	<b>N/A</b>
P	O	5DA	Danone-Weekly	BN	Merging into Main	P.O.DA1
P	O	4DA	Danone-Weekly	BN	Merging into Main	P.O.DA1
P	O	2DA	Danone-Weekly	BN	Merging into Main	P.O.DA1
P	O	1DA	Danone-Weekly	BN	Merging into Main	P.O.DA1
<b>P</b>	<b>O</b>	<b>DG1</b>	<b>Vinci (100)</b>	<b>DG</b>	<b>Main</b>	<b>N/A</b>
P	O	5DG	Vinci-Weekly	DG	Merging into Main	P.O.DG1
P	O	4DG	Vinci-Weekly	DG	Merging into Main	P.O.DG1
P	O	2DG	Vinci-Weekly	DG	Merging into Main	P.O.DG1

*Euronext Optiq Phase 3: Derivatives Markets - Order Entry Gateway (OEG), Matching Engine (ME) and Market Data Gateway (MDG) Migration Guidelines*

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
P	O	1DG	Vinci-Weekly	DG	Merging into Main	P.O.DG1
<b>P</b>	<b>O</b>	<b>EA1</b>	<b>Airbus Group (100)</b>	<b>EAD</b>	<b>Main</b>	<b>N/A</b>
P	O	5EA	Airbus Group-Weekly	EAD	Merging into Main	P.O.EA1
P	O	4EA	Airbus Group-Weekly	EAD	Merging into Main	P.O.EA1
P	O	2EA	Airbus Group-Weekly	EAD	Merging into Main	P.O.EA1
P	O	1EA	Airbus Group-Weekly	EAD	Merging into Main	P.O.EA1
<b>P</b>	<b>O</b>	<b>EX1</b>	<b>Vivendi SA (100)</b>	<b>EX</b>	<b>Main</b>	<b>N/A</b>
P	O	5EX	Vivendi-Weekly	EX	Merging into Main	P.O.EX1
P	O	4EX	Vivendi-Weekly	EX	Merging into Main	P.O.EX1
P	O	2EX	Vivendi-Weekly	EX	Merging into Main	P.O.EX1
P	O	1EX	Vivendi-Weekly	EX	Merging into Main	P.O.EX1
<b>P</b>	<b>O</b>	<b>FT1</b>	<b>Orange SA (100)</b>	<b>FTE</b>	<b>Main</b>	<b>N/A</b>
P	O	5FO	Orange - Weekly	FTE	Merging into Main	P.O.FT1
P	O	4FO	Orange - Weekly	FTE	Merging into Main	P.O.FT1
P	O	2FO	Orange - Weekly	FTE	Merging into Main	P.O.FT1
P	O	1FO	Orange - Weekly	FTE	Merging into Main	P.O.FT1
<b>P</b>	<b>O</b>	<b>GA1</b>	<b>ENGIE (100)</b>	<b>GAZ</b>	<b>Main</b>	<b>N/A</b>
P	O	5GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	4GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	2GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	1GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
<b>P</b>	<b>O</b>	<b>GL1</b>	<b>Societe Generale (10)</b>	<b>GLE</b>	<b>Main</b>	<b>N/A</b>
P	O	5GL	Soc Generale-Weekly	GLE	Merging into Main	P.O.GL1
P	O	4GL	Soc Generale-Weekly	GLE	Merging into Main	P.O.GL1
P	O	2GL	Soc Generale-Weekly	GLE	Merging into Main	P.O.GL1
P	O	1GL	Soc Generale-Weekly	GLE	Merging into Main	P.O.GL1
<b>P</b>	<b>O</b>	<b>MC1</b>	<b>LVMH (100)</b>	<b>MC</b>	<b>Main</b>	<b>N/A</b>
P	O	5MC	LVMH-Weekly	MC	Merging into Main	P.O.MC1
P	O	4MC	LVMH-Weekly	MC	Merging into Main	P.O.MC1
P	O	2MC	LVMH-Weekly	MC	Merging into Main	P.O.MC1
P	O	1MC	LVMH-Weekly	MC	Merging into Main	P.O.MC1
<b>P</b>	<b>O</b>	<b>OR1</b>	<b>L'Oreal (100)</b>	<b>OR</b>	<b>Main</b>	<b>N/A</b>
P	O	5OR	L'Oreal-Weekly	OR	Merging into Main	P.O.OR1
P	O	4OR	L'Oreal-Weekly	OR	Merging into Main	P.O.OR1
P	O	2OR	L'Oreal-Weekly	OR	Merging into Main	P.O.OR1
P	O	1OR	L'Oreal-Weekly	OR	Merging into Main	P.O.OR1
<b>P</b>	<b>O</b>	<b>SA1</b>	<b>Sanofi</b>	<b>SAN</b>	<b>Main</b>	<b>N/A</b>
P	O	5SA	Sanofi-Weekly	SAN	Merging into Main	P.O.SA1
P	O	4SA	Sanofi-Weekly	SAN	Merging into Main	P.O.SA1
P	O	2SA	Sanofi-Weekly	SAN	Merging into Main	P.O.SA1
P	O	1SA	Sanofi-Weekly	SAN	Merging into Main	P.O.SA1
<b>P</b>	<b>O</b>	<b>SG1</b>	<b>Saint Gobain (100)</b>	<b>SGO</b>	<b>Main</b>	<b>N/A</b>
P	O	5SG	Saint Gobain-Weekly	SGO	Merging into Main	P.O.SG1
P	O	4SG	Saint Gobain-Weekly	SGO	Merging into Main	P.O.SG1
P	O	2SG	Saint Gobain-Weekly	SGO	Merging into Main	P.O.SG1
P	O	1SG	Saint Gobain-Weekly	SGO	Merging into Main	P.O.SG1
<b>P</b>	<b>O</b>	<b>SU1</b>	<b>Schneider Electric (</b>	<b>SU</b>	<b>Main</b>	<b>N/A</b>
P	O	5SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	4SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	2SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	1SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
<b>P</b>	<b>O</b>	<b>TO1</b>	<b>Total (100)</b>	<b>FP</b>	<b>Main</b>	<b>N/A</b>
P	O	5TO	Total - Weekly	FP	Merging into Main	P.O.TO1
P	O	4TO	Total - Weekly	FP	Merging into Main	P.O.TO1

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
P	O	2TO	Total - Weekly	FP	Merging into Main	P.O.TO1
P	O	1TO	Total - Weekly	FP	Merging into Main	P.O.TO1
<b>P</b>	<b>O</b>	<b>UG1</b>	<b>Peugeot SA (100)</b>	<b>UG</b>	<b>Main</b>	<b>N/A</b>
P	O	5UG	Peugeot - Weekly	UG	Merging into Main	P.O.UG1
P	O	4UG	Peugeot - Weekly	UG	Merging into Main	P.O.UG1
P	O	2UG	Peugeot - Weekly	UG	Merging into Main	P.O.UG1
P	O	1UG	Peugeot - Weekly	UG	Merging into Main	P.O.UG1

## 9.2 APPENDIX A.2: CONTRACTS FOR MERGER IN TEST ENVIRONMENT

### 9.2.1 Batch 1

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
<b>A</b>	<b>O</b>	<b>EUE</b>	<b>EUE-St Opt</b>	<b>EUE</b>	<b>Main</b>	<b>N/A</b>
A	O	5EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	4EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	2EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
A	O	1EU	EUE - Weekly	EUE	Merging into Main	A.O.EUE
<b>A</b>	<b>O</b>	<b>IME</b>	<b>IME-St Opt</b>	<b>IME</b>	<b>Main</b>	<b>N/A</b>
A	O	5IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	4IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	2IC	IME - Weekly	IME	Merging into Main	A.O.IME
A	O	1IC	IME - Weekly	IME	Merging into Main	A.O.IME
<b>A</b>	<b>O</b>	<b>IEM</b>	<b>IEM-St Opt</b>	<b>IEM</b>	<b>Main</b>	<b>N/A</b>
A	O	5IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	4IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	2IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
A	O	1IG	IEM - Weekly	IEM	Merging into Main	A.O.IEM
<b>B</b>	<b>O</b>	<b>UCB</b>	<b>UCB</b>	<b>UCB</b>	<b>Main</b>	<b>N/A</b>
B	O	5UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	4UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	2UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
B	O	1UC	UCB - Weekly	UCB	Merging into Main	B.O.UCB
<b>P</b>	<b>O</b>	<b>CP1</b>	<b>Cap Gemini (100)</b>	<b>CAP</b>	<b>Main</b>	<b>N/A</b>
P	O	5CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	4CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	2CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
P	O	1CP	Cap Gemini-Weekly	CAP	Merging into Main	P.O.CP1
<b>P</b>	<b>O</b>	<b>GA1</b>	<b>ENGIE (100)</b>	<b>GAZ</b>	<b>Main</b>	<b>N/A</b>
P	O	5GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	4GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	2GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
P	O	1GA	ENGIE - Weekly	GAZ	Merging into Main	P.O.GA1
<b>P</b>	<b>O</b>	<b>SU1</b>	<b>Schneider Electric (100)</b>	<b>SU</b>	<b>Main</b>	<b>N/A</b>
P	O	5SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	4SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	2SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1
P	O	1SU	Schneider EI-Weekly	SU	Merging into Main	P.O.SU1

## 9.2.2 Batch 2

Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
<b>A</b>	<b>O</b>	<b>AKZ</b>	<b>AKZO NOBEL</b>	<b>AKZ</b>	<b>Main</b>	<b>N/A</b>
A	O	5AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	4AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	2AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
A	O	1AK	Akzo Nobel NV - Week	AKZ	Merging into Main	A.O.AKZ
<b>K</b>	<b>F</b>	<b>FTI</b>	<b>FUTURE AEX INDEX</b>	<b>AEX</b>	<b>Main</b>	<b>N/A</b>
K	F	5FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	4FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	2FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
K	F	1FT	AEX Index Weekly Fut	AEX	Merging into Main	K.F.FTI
<b>K</b>	<b>O</b>	<b>AEX</b>	<b>AEX-INDEX</b>	<b>AEX</b>	<b>Main</b>	<b>N/A</b>
K	O	AX5	AEX Weekly - 5th Fri	AEX	Merging into Main	K.O.AEX
K	O	AX4	AEX Weekly - 4th Fri	AEX	Merging into Main	K.O.AEX
K	O	AX2	AEX Weekly - 2nd Fri	AEX	Merging into Main	K.O.AEX
K	O	AX1	AEX Weekly - 1st Fri	AEX	Merging into Main	K.O.AEX
K	O	A9	AEX Daily Option - 9	AEX	Merging into Main	K.O.AEX
K	O	A8	AEX Daily Option - 8	AEX	Merging into Main	K.O.AEX
K	O	A7	AEX Daily Option - 7	AEX	Merging into Main	K.O.AEX
K	O	A6	AEX Daily Option - 6	AEX	Merging into Main	K.O.AEX
K	O	A5	AEX Daily Option - 5	AEX	Merging into Main	K.O.AEX
K	O	A4	AEX Daily Option - 4	AEX	Merging into Main	K.O.AEX
K	O	A31	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A30	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A3	AEX Daily Option - 3	AEX	Merging into Main	K.O.AEX
K	O	A29	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A28	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A27	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A26	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A25	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A24	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A23	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A22	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A21	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A20	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A2	AEX Daily Option - 2	AEX	Merging into Main	K.O.AEX
K	O	A19	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A18	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A17	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A16	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A15	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A14	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A13	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A12	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A11	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A10	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
K	O	A1	AEX Daily Option - 1	AEX	Merging into Main	K.O.AEX
<b>B</b>	<b>O</b>	<b>KBC</b>	<b>KBC Groep NV</b>	<b>KBC</b>	<b>Main</b>	<b>N/A</b>
B	O	5KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	4KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	2KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
B	O	1KB	KBC Groep - Weekly	KBC	Merging into Main	B.O.KBC
<b>P</b>	<b>O</b>	<b>CS1</b>	<b>Axa (100)</b>	<b>CS</b>	<b>Main</b>	<b>N/A</b>

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Exch.	Type	Code	Name	UL. Code	Main / Merge	Merging Into
P	O	5CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	4CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	2CS	Axa - Weekly	CS	Merging into Main	P.O.CS1
P	O	1CS	Axa - Weekly	CS	Merging into Main	P.O.CS1

### 9.3 APPENDIX B: MAPPING OF CLEARING FIELDS - OEG TO LCH

Pre-trade provision of Clearing information may be specified on an optional basis with the order entry messages. It is the responsibility of the Member to ensure this information is in line with their post trade arrangements. The data provided via order entry for the clearing fields is not subject to functional validation, and in majority of cases is forwarded to the clearing partner as provided.

The data that may be submitted is as follows:

- (a) Code of Trading Member (beneficiary of a give-up)
- (b) Position Account number;
- (c) Posting indicator (opening or closing the position)
- (d) Clearing operation mode (not specified, manual mode (a.k.a pre-posting or pre-give up), or automatic give up / posting)
- (e) And other information like the Member's internal order number or Client identification.

Mapping below provides a sub-set of fields used by Optiq in order entry, and by the Clearing partners, for the exchange of data used for clearing in the Trade Execution messages.

*Please note: Mapping for the field "Firm ID" is pending validation with the Clearing partner, and will be provided in the future version of this document.*

Optiq Order Entry				Notes	LCH Trade leg	
SBE	FIX				5011 message	
Fields	Field or Combination of fields				Fields	Description
	FIX Field Name	Tag	Possible Values			
Clearing Firm ID	NestedPartyID	524	TEST2	In CCG for Derivatives the equivalent of this field was PartyID (tag: 448)	Give-Up Destination Member Code	External id of the member who is the destination of the give-up / Member code of the beneficiary
	NestedPartyIDSource	525	D = Proprietary / Custom Code	In CCG for Derivatives the equivalent of this field was PartyIDSource (tag: 447)	N/A	N/A
	NestedPartyRole	538	4 = Clearing Firm	In CCG for Derivatives the equivalent of this field was PartyRole (tag: 452) and was represented by value 14 = Give-up Clearing Firm (firm to which trade is given up)		
	NestedPartyRoleQualifier	2384	3 = General clearing member OR	New optional field / value in Optiq		



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Optiq Order Entry				Notes	LCH Trade leg	
SBE	FIX				5011 message	
Fields	Field or Combination of fields				Fields	Description
	FIX Field Name	Tag	Possible Values			
			4 = Individual clearing member			
Account Number	Account	1		The same field was used in CCG for Derivatives.	Position Account External ID	Position account external id of a pre-posting - filled by the executing member from the trading station (needed if automatic function used has to be an existing LCH SA position account)
Client ID	NestedPartyID	524	TEST1	In CCG for Derivatives the equivalent of this field was SecondaryClOrdID (tag: 526)	Posting Order Number	Posting order number for a pre-posting
	NestedPartyIDSource	525	D = Proprietary / Custom Code		N/A	N/A
	NestedPartyRole	538	3 = Client ID			
	NestedPartyRoleQualifier	2384	23 = Firm or legal entity OR 24 = Natural person			
Free Text	Text	58		In CCG for Derivatives the equivalent of this field was ClientInfo (tag: 5789)	Memo / Mailing Comment	Free form text . This field is just conveyed by the clearing system. No processing is involved. (Can be used for internal reference or client references.)
Clearing Instruction	ClearingInstruction	577	Permitted Values: 0 = Process normally 8 = Manual mode 9 = Automatic posting mode 10 = Automatic give-up mode	The same field was used in CCG for Derivatives.  The mapping of the values used are provided in a dedicated table below	Type of Clearing Information	This field indicates if the trade leg contains a pre-posting or a pre-give-up Permitted values: " " = None 0 = Pre-posting or Pre-give-up 1 = Automatic posting 2 = Automatic give-up
Order ID	OrderID	37	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	The same field was used in CCG for Derivatives.	Trade leg Order Number	Free Text
Open Close	PostingAction	7443	0 means Open 1 means Close	The same field was used in CCG for Derivatives. Values however were modified from charters of O and C, to their numerical equivalents of 0 and 1	O/C INDICATOR	Posting indicator; this field indicates if the posting is closing position or opening position Permitted values: C Posting in closing O Posting in opening



The previously used values in CCG for Clearing Instructions for UTP-d that map to these are as follows:

UTP / CCG Values (Legacy)		Optiq OEG Values Step 2		LCH 5011 values	
0	Undefined / Process normally	0	Process normally	“ “	None
8	Manual	8	Manual mode	0	Pre-posting or Pre-give-up
9	Automatic	9	Automatic posting mode	1	Automatic posting
4010	Give-up to single firm	10	Automatic give-up mode	2	Automatic give-up
4008	Automatic and account authorization	8	Covered by value “8” – Automatic posting mode	Mapping as above for equivalent Optiq value	
4009	Manual and account authorization	9	Covered by value “9” – Manual mode	Mapping as above for equivalent Optiq value	

### Account Type field

In Optiq order entry messages the AccountCode is replaced with a combination of fields *Account Type / Account Code* (6399) and *LP Role / LP Role* (20021).

The value in the field Account Type remain similar to the ones used in UTP. However, it contains values that are used currently only on the Cash markets,.

Table below provides mapping between the fields in the two files, to obtain single result that will be used in the future in all files in Optiq and clarification of use on the Cash and Derivatives Markets:

UTP / CCG Values	Optiq OEG				Notes
Legacy (Binary and FIX)	SBE		FIX		
AccountCode (tag 6399)	Account Type	LP Role	Account Code (6399)	LP Role (20021)	
C = Client	1 = Client	Not filled in	1 = Client	Not filled in	
H = House	2 = House	Not filled in	2 = House	Not filled in	
N/A	6 = Liquidity Provider	3 = Retail Liquidity Provider	6 = Liquidity Provider	3 = Retail Liquidity Provider	Used on the Cash Markets only (Equities segment)
N/A	4 = RO	Not filled in	4 = RO	Not filled in	
M = Market Maker	6 = Liquidity Provider	1 = Liquidity Provider or Market Maker	6 = Liquidity Provider	1 = Liquidity Provider or Market Maker	
N/A	7 = Related Party	Not filled in	7 = Related Party	Not filled in	
N/A	8 = Structured Product Market Maker	Not filled in	8 = Structured Product Market Maker	Not filled in	Used on the Cash Markets only (Warrants & Certificates segment)
NEW	14 = Omega Client	Not filled in	14 = Omega Client	Not filled in	New values introduced for commercial packages on the Derivatives segments. Within the use for the Omega commercial package it represents a clearing account of Client.
NEW	15 = Ceres Client	Not filled in	15 = Ceres Client	Not filled in	New values introduced for commercial packages on the Derivatives segments. Within the use for

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UTP / CCG Values	Optiq OEG				Notes
Legacy (Binary and FIX)	SBE		FIX		
AccountCode (tag 6399)	Account Type	LP Role	Account Code (6399)	LP Role (20021)	
					the Ceres commercial package it represents a clearing account of Client.



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/ EquityDerivatives / Current	OptiqOEG_<ENVIRONMENT>_SBETemplate_Commodities_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_CashTickSizeReferentialFile_EquityDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_EquityDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeFile_EquityDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_OpenInterestFile_EquityDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_SBETemplate_EquityDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_ReferenceSpreadsFile_EquityDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_TimeTableFile_EquityDerivatives_YYYYMMDD.xml	
/ IndexDerivatives / Current	OptiqOEG_<ENVIRONMENT>_SBETemplate_EquityDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_CashTickSizeReferentialFile_IndexDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_IndexDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeFile_IndexDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_OpenInterestFile_IndexDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_SBETemplate_IndexDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_ReferenceSpreadsFile_IndexDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_TimeTableFile_IndexDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_TotalReturnFuturesConversionParameters_IndexDerivatives_SOD_YY YYYYMMDD.csv	Name Update
	OptiqMDG_<ENVIRONMENT>_TotalReturnFuturesConversionParameters_IndexDerivatives_SOD_YY YYYYMMDD.xml	Name Update
	OptiqMDG_<ENVIRONMENT>_TotalReturnFuturesConversionParameters_IndexDerivatives_EOD_YY YYYYMMDD.csv	Name Update
	OptiqMDG_<ENVIRONMENT>_TotalReturnFuturesConversionParameters_IndexDerivatives_EOD_YY YYYYMMDD.xml	Name Update
	OptiqOEG_<ENVIRONMENT>_SBETemplate_IndexDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_CashTickSizeReferentialFile_FinancialDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesStandingDataFile_FinancialDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_DerivativesTickSizeFile_FinancialDerivatives_YYYYMMDD.xml	New for P3
/ FinancialDerivatives / Current	OptiqMDG_<ENVIRONMENT>_OpenInterestFile_FinancialDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_SBETemplate_FinancialDerivatives_YYYYMMDD.xml	
	OptiqMDG_<ENVIRONMENT>_ReferenceSpreadsFile_FinancialDerivatives_YYYYMMDD.xml	New for P3
	OptiqMDG_<ENVIRONMENT>_TimeTableFile_FinancialDerivatives_YYYYMMDD.xml	
	OptiqOEG_<ENVIRONMENT>_SBETemplate_FinancialDerivatives_YYYYMMDD.xml	New for P3

## 10. SUMMARY OF CHANGES

REVISION NO./ VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
2.0	26 June 2019	Euronext	Second release for Optiq Phase 3 – migration of Euronext Derivatives markets to Optiq OEG / ME / MDG
1.0	28 February 2019	Euronext	First release for Optiq Phase 3 – migration of Euronext Derivatives markets to Optiq OEG / ME / MDG

Version	Change Description
2.0	<p>Second release of Optiq Phase 3 migration of Euronext Derivatives markets to Optiq OEG / ME / MDG containing the following updates:</p> <ul style="list-style-type: none"> <li>In “ASSOCIATED DOCUMENTS” – note on what documents were already published. Removed “Euronext Cash Markets - Change Highlights – Optiq MDG Phase 1 to 3”.</li> <li>In 2.2.2 “Partitions and Instrument Mapping” – removed “subject to final confirmation”. Corrected name of MDG specifications page.</li> <li>In 3.1.1. “SBE compatibility” – changed V1## to reflect V200. Added note on Completed steps.</li> <li>In 3.1.2 – Updated table to reflect SBE V2XX</li> <li>In 3.1.3 “Symbol Index of Existing Instruments” – added note that active and dormant strategies will not maintain their existing symbol index values.</li> <li>In 3.2.1 – Updated text to reflect completed event</li> <li>In 3.2.2 – Updated the table of changes and note on the partition change target for Next EUA, Current EUA, and Production. Created table with effective dates. Added notes on EFS for Current EUA and Production</li> <li>In 4.1 – Added completed notes.</li> <li>In 4.2 - “Migration Sequence” – added Completed step.</li> <li>In 4.2.1 “Market data segmentation change” – Updated section to reflect the completed steps.</li> <li>In 4.2.2 – Added note of early market closure on Friday before migration to Optiq. Modified order purge to 19:15 CET, added table with contracts closing early. No evening session.</li> <li>In 4.2.3 – Updated information about the merger of contracts implementation</li> <li>In 4.3.1 “Drop Copy” – amended name of document.</li> <li>In 4.3.5 – renamed Optiq file specifications reference.</li> <li>In 4.3.5 “Euronext File Services (EFS)” removed a file “Derivatives Parameter file”, as it will be part of the overall Derivatives Standing data file</li> <li>In 4.4 - Added note on completed steps, added note on upcoming steps. Moved certain info to the Customer Checklist table.</li> <li>In 4.4.1 – Updated text and removed the table as completed step</li> <li>In 4.4.2 – amended text to reflect completed steps. Changed note about Drop Copy availability for a later stage.</li> <li>In 4.4.2.1 – Updated technical documentation to be provided in September</li> <li>In 4.4.3 – Added table for list of conformance tests and requisites. Removed duplicate sentence.</li> <li>In 4.4.4 – added note that trading members must confirm with their clearing member, also added note for starting date and LCH v-EUA connectivity.</li> <li>In 4.4.6 – removed duplicate table</li> <li>In 4.4.7 – Updated six to two to four weeks</li> <li>In 4.5 – Added note on completed step, updated content, moved content from section 4.4.</li> <li>In 4.6.1 – updated document title and note for telnet</li> <li>In 5 – Updated text and dates inside table</li> <li>In 7 – Updated list of document</li> <li>In 8 – Updated support details</li> <li>In Appendix B “MAPPIG OF CLEARING FIELDS - OEG TO LCH” – corrected SBE name of the field from Posting Action to Open Close</li> <li>In Appendix D “FILES &amp; FOLDERS FOR IMPLEMENTATION OF PHASE 3” – updated to contain the Target Setup of Files and Folders for Phase 3</li> </ul>
1.0	First release for Optiq Phase 3 – migration of Euronext Derivatives markets to Optiq OEG / ME / MDG

