GUIDE TO THE EURONEXT TRADING SYSTEM

Borsa Italiana Migration to Optiq®: overview of functional changes

Version 3.1

September 2023
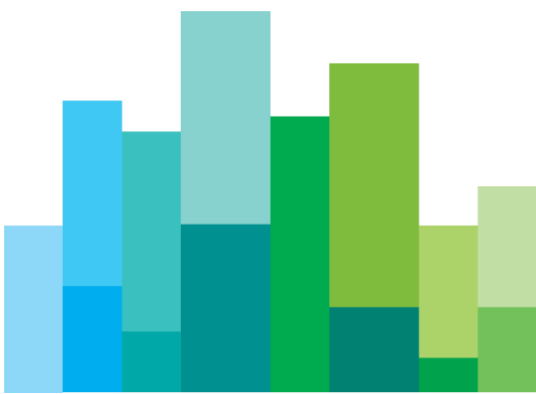
EURONEXT

TABLE OF CONTENTS

EURONEXT

EURONEXT

1. INTRODUCTION

Following Euronext's acquisition of Borsa Italiana in April 2021, Borsa Italiana's trading systems **will migrate from the Millennium Exchange and SOLA systems to the Euronext Optiq® platform**.

Optiq® offers a single resilient route to the Euronext pan-European Cash and Derivatives markets, providing reliability, enhanced throughput, predictable latency and a flexible messaging model, for all asset classes.

The move to the Optiq platform allows Euronext to deliver an access model that is streamlined across markets, leveraging on its leading-edge technology. The design of the system allows shorter time-to-market for the delivery of new products and the implementation of requests from clients, while creating an opportunity for members to reduce their administrative costs.

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The migration of Borsa Italiana to Optiq will allow its trading participants to **benefit from existing features provided by the platform through improved connectivity and backward/forward compatible protocols, and an optimised messaging model.** The key goal of the migration is to adopt the best practices from the current experience of both the Borsa Italiana and Euronext markets: maintaining key local specificities that have strong market value and harmonising across markets wherever relevant. All trading members will therefore have the ability to benefit from the enhanced features provided by the migration.

As a consequence, **most of the functionalities developed for the migration of Borsa Italiana will be implemented on the legacy Euronext markets.** Depending on the impact, the implementation will be done before, during or after the migration of Borsa Italiana.

The migration of the Borsa Italiana markets to the Euronext Optiq® trading platform will thus be sequenced in different phases:

Pre-migration: End 2022 – Optiq upgrades for legacy Euronext clients **[done]**

27 March 2023 – Cash products: **Equities** (incl. MIV market), **ETFs** and **ATFund** **[done]**

11 September 2023 – Cash products: **Warrants & Certificates, Fixed Income** and **EuroTLX**

25 March 2024 – Derivatives products: **Equity and Index Derivatives**

1.1. PURPOSE OF THE DOCUMENT

The purpose of this document is to **provide clients with an overview of the functional changes that will be applied to Optiq®** with regards to the migration of the Italian markets, planned as per the above phases.

The objective of the document is to highlight functional changes that will impact:

▪ The **clients currently trading on the Italian markets**;

▪ The **current Optiq platform**, leading to **some adjustments for clients of the legacy Euronext markets** that are already connected to the Optiq platform for trading and/or market data services.

EURONEXT

All information shared in this document is subject to regulatory approval and may be adjusted along with the migration.

1.2. TARGET AUDIENCE

The intended audience of this document is all Trading Members of either the legacy Euronext markets or the Borsa Italiana markets.

This document is for informational purposes only and should be consulted alongside the related documentation detailed in the Associated Documents section. Multiple versions of this document may be issued with latest changes and information that may be required on client's side.

1.3. ASSOCIATED DOCUMENTS

The following documents should be read in conjunction with this one and provide additional information on the way Optiq currently works and/or on the connectivity model. Please refer to the **IT Documentation page** for the latest versions of the documents indicated below:

Optiq Connectivity:

- Euronext Cash and Derivatives Markets Optiq OEG Service - Interface Specification
- Euronext Cash and Derivatives Markets Optiq OEG Service - Connectivity Telnet Tests
- Optiq MDG Production Connectivity - Euronext Cash and Derivatives Market
- Optiq MDG EUA Connectivity - Euronext Cash and Derivatives Market
- Euronext Optiq Market Data Gateway MDG Lite - Production Connectivity
- Euronext Optiq Market Data Gateway MDG Lite - External User Acceptance Environment

Optiq Kinematics:

- Euronext Cash Markets - Optiq OEG MDG - Kinematics Specification
- Euronext Derivatives Markets – Optiq OEG MDG - Kinematics Specification

Optiq OEG & MDG specifications:

- Euronext Cash and Derivatives Markets – Optiq MDG Messages – Interface Specification
- Optiq OEG FIX 5.0 Messages - Interface Specification - Euronext Cash and Derivatives Markets
- Optiq OEG SBE Messages - Interface Specification - Euronext Cash and Derivatives Markets
- Euronext Cash and Derivatives Markets - Optiq MDG Messages - Interface Specification
- Euronext Cash and Derivatives Markets - Optiq Files - Interface Specification

Common File Transfer System (CFTS)

- Euronext Cash and Derivatives Markets - Common File Transfer System - User Guide

Functional Overview

- Euronext Cash Market - RiskGuard User Guide
- Request For Quote - Detailed Functional Specification

EURONEXT

- Optiq IPO Equity Issuing – Direct Distribution User Guide
- Euronext Derivatives How The Market Works

Saturn & TCS:

- Euronext Global Reporting Solution – Saturn Interface User Guide
- Euronext Saturn Web Services Specifications
- Euronext Short Long Code Management Application
- Euronext Off-Book On-Exchange Trades Publication – Market Model Overview
- Euronext APA/ARM Services – Functional Overview Version
- Euronext Saturn MiFID II Commodities Positions Reporting
- TCS Web Access – User Guide

For the latest version of documentation please visit the **IT documentation** page on the Euronext Connect customer web portal.

*Note: Current documentation available on the IT documentation page does not contain the changes listed in this document. Updates on **Documentation** and **Technical Specifications** including the evolutions to be delivered as part of the migration, will be published in due course and made available to clients.*

Clients are also advised to refer to the Euronext Rule Books and Regulatory documentation on the **Euronext website**.

1.4. GLOSSARY

1.4.1. Mapping and target wording

Borsa Italiana	Euronext Equivalent	Definition
Segment	Trading Group (cash markets) Segment (Derivatives markets)	Markets and products within Euronext are divided into: - Trading Groups for Cash markets (based on different trading procedures) - Segments for Derivatives markets (i.e. universe of instruments sharing common trading and financial properties). The composition of these is determined by factors such as the particular characteristics (trading methods, type of market, nationality, etc). A segment within Borsa Italiana is considered to be a part of a market (e.g. a part of Fixed Income).

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Partition of trading engine	Partition	Technical subdivision of an Optiq segment. An Optiq segment may be made up of one or several partitions, physically independent from one another, but connected to each other within the context of the Optiq segment. Instruments may move from one partition to another within an Optiq segment.
CompID (on MIT) UserID (on SOLA)	Logical Access	A Logical Access is the logical entry point for clients to the Order Entry Gateway (OEG) and Drop Copy Gateways. It contains the technical configuration for the client's connectivity. Members can choose between different capacities for a Logical Access.
Member Code (associated to CED Code)	Firm ID	Unique identifier of an investment firm or financial institution that deals, advises, clears and/or acts on behalf of its clients and possibly itself on the Euronext markets, and with its clearing and settlement partners. The ID is assigned to the firm during the process of becoming a participant of the Euronext markets. It is possible to have Multiple Firm IDs associated to the same CED Code.
CDS (test environment), including Standard CDS and legacy CDS (aligned to production)	EUA, including Next EUA (equivalent to Standard CDS) and Current EUA (equivalent to legacy CDS)	External User Acceptance (EUA) test environments, providing technical and functional assistance to clients for testing. Euronext currently offers two separate EUA test environments: current EUA, which mirrors the production environment, and Next EUA, for future developments.

1.4.2. Acronyms & definitions

Term or Acronym	Definition
CoD	Cancel on Disconnect. Mechanism which triggers an automatic cancellation of all non-persisted orders upon disconnection of the client whether voluntary or due to an issue.
CPX	Closing Price Cross (trading phase available on legacy Italian markets)

DCRP	Dynamic Collar Reference Price
Drop Copy	Drop Copy is a real time feed with all participants' submitted orders (including orders' changes of state) and trades
EMC	Exceptional Market Conditions
FIX	Financial Information Exchange Protocol (industry standard for trading protocols)
KIBI	Knock-In By Issuer
KOBI	Knock-Out By Issuer
Legacy Euronext Markets	Markets already trading on Optiq (Paris, Amsterdam, Brussels, Lisbon, Dublin, Oslo)
Legacy Italian Markets	Borsa Italiana markets being migrated onto Optiq
LP	Liquidity Provider
MDG	Optiq® Market Data Gateway
MM	Market Making (or Market Maker)
OEG	Optiq® Order Entry Gateway
OI	Open Interest
PAKO	Payment After Knock-Out
RFE	Request For Execution
RFQ	Request for Quote
SBE	Simple Binary Encoding - Optiq® Trading Native Binary Protocol (industry standard for binary trading protocols)
Segment	In Optiq, the trading chains are organised per segment. A segment corresponds to a specific asset class. A segment can be operated on one or many Optiq partitions. Orders cannot be routed from one segment to another.
SMC	Stressed Market Conditions
Standing Data	Set of data that provides referential characteristics of all trading instruments available on Euronext markets. The data is provided via files and messages
STP (or SEP)	Self-Trade Prevention (or Self-Execution Prevention)
TAL	Trading At Last

TCS	Trade Confirmation System. Platform used for transactions benefiting from a pre-trade transparency waiver and executed outside the Euronext central order book.
TPS	Transaction Per Second
TVTIC	Trading Venue Transaction Identification Code
TUI	Trade Unique Identifier is a single identifier, on working as an unique reference for trade. It will be used as new TVTIC format across the market chain. It will be available in Saturn, Drop Copy, MDG, EOD File Service, RTS 22, RTS 24 and clearing real time messages & reports.

1.5. DOCUMENT HISTORY

This document will be updated regularly and has been through the following iterations:

Document version	Date	Change Description
1.0	29.03.2022	Initial version of the document
1.1	12.05.2022	Changes in sections: ▪ **4.3.1** Logical Access (Trading Sessions) ▪ **4.4.12** Deferred publication for orders to execute wholesale transactions ▪ **4.4.18** Order duration (GTD, GTC) ▪ **4.4.19** Strategy Trading on Derivatives markets
1.2	31.03.2023	Changes in sections: ▪ **2.1** Scope of Market Migration ▪ **4.4.6** Closing and Official Price ▪ **4.4.15** Trading At Last vs Closing Price Cross (CPX) ▪ **4.4.17 (ix)** Bilateral Transactions/Cross orders/Block Trade Facility ▪ **4.4.26** Public distribution features ▪ **4.4.27** MIC codes ▪ **4.4.28** ATFund market ▪ **4.8.1** Collars ▪ **4.8.2** Stressed Market Conditions (SMC) & Exceptional Market Circumstances (EMC) ▪ **4.12.4** Optiq Partitions ▪ **4.14** Session Timetables
2.0	18.05.2023	Changes in sections: ▪ **3.3.** Market Making and Liquidity Provision ▪ **4.4.4.** Execution Prevention between Liquidity Providers ▪ **4.4.14.** TVTIC

EURONEXT

		▪ **4.4.15** Trading At Last vs Closing Price Cross (CPX) ▪ **4.4.16** Warrants & Certificates ▪ **4.4.17** Order types, (v) Stop Orders ▪ **4.4.26** Public distribution features ▪ **4.4.29** Multi-Listed Instruments ▪ **4.14** Session Timetables ▪ **5.** Trading Hours and calendar
3.0	2.08.2023	Changes to sections: ▪ **4.4.7** Uncrossing Auction Price (& mechanisms) ▪ **4.4.8** Quantity and notional value controls at order entry ▪ **4.4.9** Indicative Matching Price validation at the end of call phases ▪ **4.4.17 (ii)** Market to Limit Orders and **(v)** Stop Orders ▪ **4.4.27 (iv)** FIA Execution Source Code scheme (FIX Tag 1031) ▪ **4.8.1** Collars ▪ **4.9** Dissemination of Open Interest ▪ **4.12.4** Optiq Partitions ▪ **4.14** Session Timetables Addition of sections: ▪ Creation of a **Derivatives section (4.4.27)** for features only relevant to Derivatives ▪ **4.4.27 (i)** Daily Settlement Price and Official Closing Price ▪ **4.4.27 (ii)** Exchange Delivery Settlement Price ▪ **4.4.27 (vi)** Suspension due to Underlying ▪ **4.4.27 (vii)** Lot Multiplier ▪ **4.4.27 (viii)** Expiration Date ▪ **4.4.27 (ix)** Automated Market Reference (AMR) ▪ **5.1.4** Derivatives On and Off Book
3.1	29.09.2023	Addition of sections: ▪ **4.4.27 (x)** Corporate Action Counter ▪ **4.11.2** Trader ID ▪ **4.11.3** Give Up Process

Changes from the previous version are marked with a red vertical line on the left of the text.

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2. MIGRATION HIGH-LEVEL SCOPE
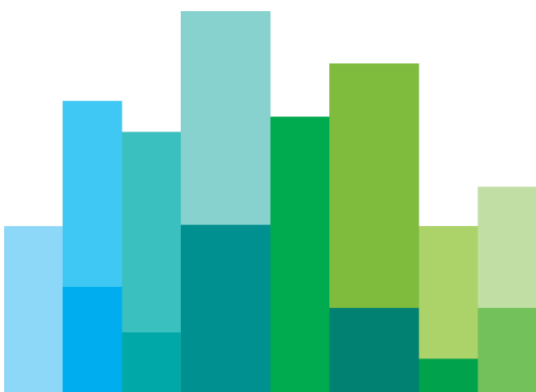
The proprietary Euronext trading system, Optiq®, will become the unique trading platform for accessing all Euronext Cash and Derivatives markets.

2.1. SCOPE OF THE MARKET MIGRATION

Borsa Italiana markets will be migrated onto Optiq except Agrex and Idex, leading to a harmonisation of the trading systems and a decommissioning of Millennium Exchange and SOLA technologies.

	Italian Markets	Migration to Optiq®?	Optiq® Segments
Cash	Euronext Milan	✔	**Cash Equities**
	Euronext Growth Milan (EGM)	✔	
	Bit GEM	✔	
	Equities (EuroTLX)	✔	
	Euronext MIV Milan	✔	
	TAH	✔	**Euronext Block (MTF)**
	ETF Plus	✔	**ETFs & Funds**
	ATFund[1]	✔	
	SeDeX	✔	**Structured Products** (Warrants & Certificates)
	Cert-X (EuroTLX)	✔	
	Bond-X (EuroTLX)	✔	**Fixed Income**
	MOT	✔	
	ExtraMOT	✔	
Derivatives	IDEM	✔	**Equity Derivatives**
			Index Derivatives

Note: <u>MTS is not in the scope of the migration to Optiq</u>.

The table below provides a summary of the Borsa Italiana migration scope per type of activity and system:

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[1] Hosted on TCS

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	Products & Services	Markets	Current platform	Target platform
Cash	Cash Equities	Euronext Milan (MTA), Bit GEM, EGM, TAH, MIV, ETLX Equities	Millennium	Optiq
	ETFs & funds	ETF Plus, ATFund*	Millennium	
	Warrants & Certificates	SEDEX, ETLX (Cert-X)	Millennium	
	Fixed Income	MOT, ExtraMOT, ETLX (Bond-X)	Millennium	
Derivatives	Equities & Index derivatives	IDEM	SOLA	
Market Data	Market Data	ALL	GTP, GTP Lite, HSVF	
Portal	Member Portal	ALL	Borsa Member Portal	MyEuronext
Regulatory Reporting	Transaction Reporting	ALL	Unavista	Saturn
	Short-Long Code (SLC)	ALL	Borsa Member Portal	Saturn

***ATFund is hosted on TCS**

Note: *The index provider (FTSE) for the Italian markets will not change. Index value updates for these indices will not be disseminated via Optiq® MDG.*

2.2. MIGRATION PRINCIPLES

In this section we give a high-**level description of the main migration principles and developments required by clients** (both those already connected to the Optiq trading platform and/or market data feed, and those not yet connected). It may not be fully exhaustive and will be enriched along with the progress.

Main migration principles for clients of <u>Italian markets</u>:

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- As Italian markets will join the Optiq Central Order Book (COB), **clients will be able to trade Italian instruments via the same Logical Accesses they use for all Euronext instruments** hosted on the same segment;
- **The post-trade (clearing and settlement) set-up and rules will remain** unchanged for Borsa Italiana's customers. Optiq will be connected via X-TRM to Euronext Securities Milan (formerly Monte Titoli), to the ICSDs and to Euronext Clearing (formerly CC&G);
- Details on the **Regulatory Reporting services related to Optiq** (e.g. Order Record Keeping and Transaction Reporting) are provided **in dedicated sections of this document**;

- **Client that are not yet connected to Optiq Trading and/or Market Data Services may need to upgrade, adapt or change the connectivity they currently use to connect to Italian markets** (e.g. colocation). Please see the *Connectivity* section of this document for further details.

Main migration principles for all clients:

- All clients (both those already connected to the Optiq trading platform and/or market data feed, and those not yet connected) are **advised that developments on trading and market data applications will be required**, either done internally (for in-house applications) or by a third-party vendor;

- As part of the migration, **Euronext will accelerate its digitalisation programme**. Clients will benefit from new widgets accessible via the Connect customer portal to manage Logical Accesses, RiskGuard, Market Making set-up, contacts and file transfer, as well as listing and Corporate Actions, when applicable;

For legacy Euronext markets, the delivery of functional changes related to the migration to Optiq already started. We therefore encourage clients to review the impacts of changes that are being delivered as soon as possible using this document along with specifications available on Connect and liaise with their providers if needed.

Euronext will keep clients updated regularly via announcements sent to clients and webinars organised throughout the project. More information related to the migration framework and related principles will be provided on a later stage to clients in a dedicated document.

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3. OPTIQ® IN A NUTSHELL
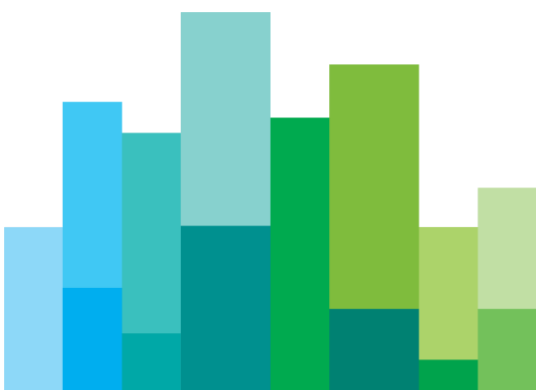
This section provides a high-level overview of the Optiq® platform, focusing on access to the Euronext markets through "Logical Accesses" (trading sessions) and Member Configuration.

It is targeted at clients that are not yet familiar with the Optiq technology. For further information and a more detailed presentation, please refer to the document **Optiq® OEG Connectivity Specifications** available on the **IT documentation page** of the Euronext Connect customer web portal.

3.1. BASIC CONCEPTS

The current Optiq trading chain is composed of three (3) main core components:

An Order Entry Gateway (OEG) with two protocols available:
- o   FIX 5.0 SP2
- o   SBE (Simple Binary Encoding)

A Matching Engine (ME)

A Market Data Gateway (MDG)
- o   Market Data provided via multicast feed in SBE format
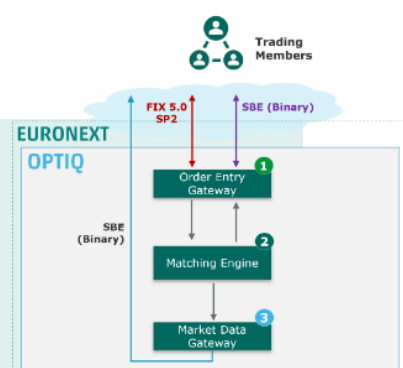
Optiq is designed to provide a logical segregation per type of asset class:

- Euronext tradable instruments are accessible for trading across independent **Optiq segments;**

- An Optiq segment defines a universe of instruments belonging to the same asset class, sharing common financial properties;

- Optiq architecture offers increased resilience (as a failure of a single Optiq segment has limited technical impacts on other segments) as well as flexibility (e.g. possibility of independent software and operational lifecycle);

- To optimise capacity and performance, a segment can be split into multiple **Optiq partitions** (the partition represents the technical and physical sub-division of an Optiq segment). The system has been designed to be able to seamlessly increase the number of partitions on a given segment. The instruments in each segment are load-balanced across the segment's partitions; the details of the allocations are available in the standing data.

The table below provides an overview of the existing Optiq segments across the legacy Euronext markets.

CASH SEGMENTS	**Equities**	**Fixed Income**	**ETFs & Funds**	**Warrants & certificates**	**Euronext Block (MTF)**
DERIVATIVES SEGMENTS	**Equity Derivatives**	**Index Derivatives**	**Commodity Derivatives**		
PUBLICATION SEGMENTS	**Indices**	**APA**	**Irish Bonds & Funds**	**Euronext FX**	

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Italian instruments will be included in these segments together with all the other legacy Euronext instruments. At the moment of the migration, load balancing will be carried out to secure comparable performances of the different partitions of a segment.

The Optiq connectivity model is managed through "Logical Access":
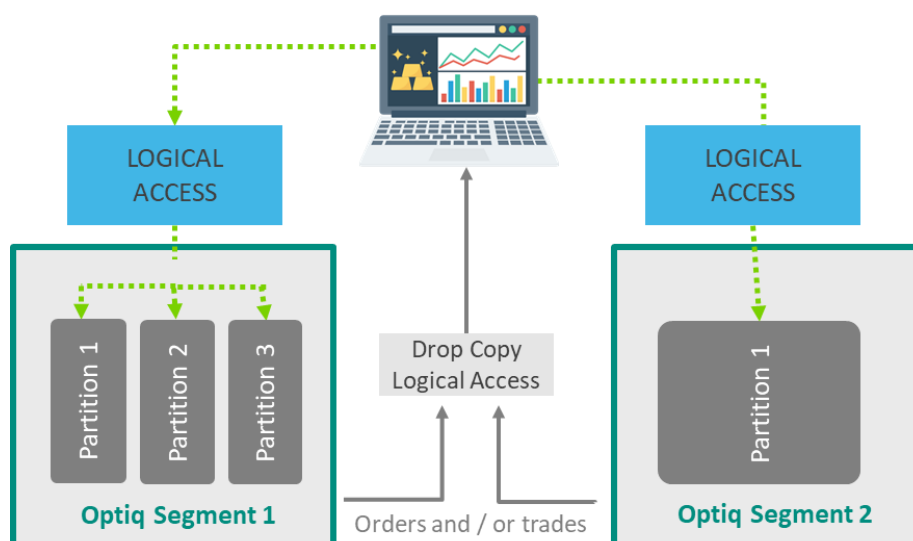
A Logical Access (LA) represents the logical access point to an Optiq segment.
Members should have at least one LA per segment on which they have trading authorisations.

Note: Drop Copy sessions are cross-segment, giving the ability to a member to monitor all its trading activity on Cash or Derivatives markets across all segments.

The same Logical Access can be used to:

▪ Trade on multiple Euronext markets (including Borsa Italiana markets that will not have dedicated partitions / accesses);

▪ Connect to all partitions of a segment.

Trading Members can select the capacity (TPS) of their Logical Accesses based on their trading activity and member profile.

There are different types of Logical Accesses available:

▪ Standard sessions (for "standard" trading purposes – no MM/LP)[2];

▪ Dedicated sessions for:
  o Liquidity Providers[3]/Market Makers
  o RiskGuard.

Note: for Italian Fixed Income markets (MOT/ExtraMOT and BOND-X within EuroTLX), for LP activity:

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[2] Standard sessions can be used for LP/MM activity on derivatives when orders are used instead of quotes for quoting (depending on product type).
[3] On Cash markets other than Fixed Income and Warrants & Certificates, dedicated LAs for Liquidity Providers are not mandatory, clients can use standard sessions tagging orders as LP (see following sections)

- Dedicated and separate Firm ID(s) and Logical Accesses for LP activity on MOT/ExtraMOT will be needed

- Dedicated and separate Firm ID(s) and Logical Accesses for LP activity on BOND-X (EuroTLX) will be needed

Capacity (TPS) is always defined at partition level. Customers have the possibility to establish a physical connection to each partition of a segment and send messages directly to the partition on which the instrument is located (data provided in the Standing Data files). This configuration is recommended not only for optimal latency to benefit from the capacity set for the whole Optiq segment, but also for resilience.

The Optiq platform offers a flexible and predictable throttling mechanism across Cash and Derivatives markets:

- Each session has a maximum number of messages, i.e. the throttling limit;

- For messages exceeding the throttling limit:
  - Customers can choose either to use the queuing mechanism, or to use the default rejection mechanism for the messages over the limit
  - The choice is made in the Logon message
  - Queuing of messages is provided as a service, so if throttling is triggered, a limited number of messages over the throttling limit is allowed;

- The limit is applied to all messages sent.

3.2. ACCOUNT TYPES AND TRADING CAPACITIES

The Optiq Trading Platform **supports various Account Types**:

- House
- Client
- Liquidity Provider and Market Maker (LP)
- Retail Organisation (for the Best of Book (BoB) service)

As of the migration date, the following trading capacities will be available, in line with MiFIR order record-keeping requirements:

- Dealing on own account (DEAL)
- Matched principal (MTCH)
- Any other trading capacity (AOTC)

The "unmatched principal" and the "proprietary" trading capacity, currently in use for the EuroTLX market, will be decommissioned together with the migration of EuroTLX to Optiq.

Please see below the list of accepted combinations of Account Types and Trading Capacities for Italian markets:

- DEAL/House
- MTCH/House
- AOTC/Client
- MTCH/Client
- DEAL/House
- DEAL/LP
- AOTCH/LP

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- AOTCH/Retail Organisation
- MTCH/Retail Organisation

Any other combination will cause order rejections.

3.3. MARKET MAKING AND LIQUIDITY PROVISION

- **On the Derivatives markets:** depending on each product, Market Makers can fulfil their obligations using **Quotes** and/or **orders flagged with Account Type "Liquidity Provider"**. Dedicated messages for Market Makers i.e. Sign-In, Quotes, Market Maker Protection, are **only available in SBE format** and through dedicated Logical Accesses.

- **On the Cash markets** (with the exception of Structured Products): Liquidity Providers can fulfil their obligations using **orders** flagged with Account Type "**Liquidity Provider".**

- **On Structured Products**: Liquidity provision is accomplished with **Bulk Quotes** and Account Type "**Liquidity Provider**". Market Makers and secondary Liquidity Providers send orders tagged with Account Type "Market Maker or 2nd[ary] Liquidity Provider".

Market participants are reminded that, as a consequence of the elimination of the "Exchange Market Size" (EMS) parameter for Italian cash markets, the size obligation for market making and liquidity provision will now be expressed directly in monetary value, instead of as a multiplier of the EMS. As a consequence, the quarterly review of the EMS parameter will also be decommissioned.
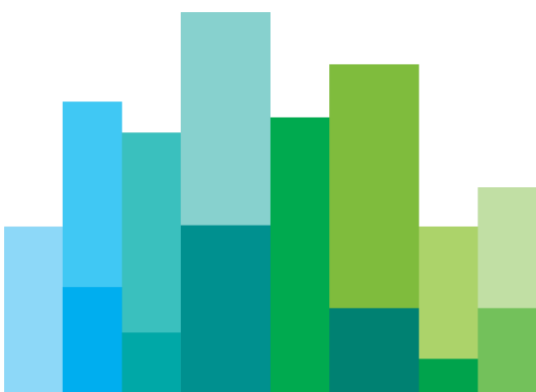
4. SUMMARY OF MAIN CHANGES

Prior to the migration of Italian markets onto Optiq, **a detailed analysis of functional and technical differences between the legacy Euronext and Italian markets** (including Order Entry and Market Data) **has been completed**. All differences have been assessed and analysed, leading to the following decisions:

- For "common" functionalities (i.e. available on both legacy Euronext and Italian markets with some functional and/or technical differences):
    - A subset of functionalities will be kept as they are already implemented in Optiq
    - Other functionalities will be amended based on the model currently available in the Italian markets

- For functionalities only available for the Italian markets:
    - A small number of functionalities will be decommissioned due to a limited usage by clients or to favour harmonisation across all Euronext markets
    - Others will be implemented in Optiq, either for all markets or solely for the Italian markets

Only day-1 functional changes are shared within this document. Day-1 is considered as the migration dates of the Italian Markets on Optiq.

4.1. GENERAL CONCEPTS

Throughout the document, the following table format is used to qualify changes and indicate the asset classes and markets that are impacted:

For all functional changes presented in this document, it is specified whether the change impacts:
- Legacy Euronext markets;
- Italian markets

Note: For the purpose of highlighting changes on Italian markets, the Equity Segment is mean to include TAH /Trading After Hours Market) although it will be hosted within the Euronext Block (MTF) Segment.

4.2. SUMMARY OF FUNCTIONAL CHANGES

The tables below summarise all of the functional changes detailed in this document.

Note:
- **Only services that are impacted by the changes are displayed** below and that this is subject to change;
- **Only changes impacting available as of day-1** (for the migration by March 2024) are shared within this document;
- **Blank boxes are equivalent to no change or N/A** in the below tables.

4.2.1. Legacy Euronext markets

Trading/OEG

- Core Trading Functionalities

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Self-Trade Prevention	Optional	Change of service	●	●		●	●
Controls on dealing capacity*	Mandatory	New Service	●	●	●	●	●
Closing and Official Price	Mandatory	Change of service	●	●		●	
Uncrossing Auction Price (random uncrossing)	Mandatory	Change of service	●	●		●	●
Quantity and Notional Value controls at Order Entry	Mandatory	Change of service	●	●	●	●	
Indicative Matching Price validation at the end of Call phases	Mandatory	Change of service					●
Request for quotes (RFQ)	Optional	New Service				●	
RiskGuard Services & Pre-Trade Risk Controls	Optional	Change of service	●	●		●	●
Trading Venue Transaction Identification Code (TVTIC)	Mandatory	New service	●	●	●	●	●
Trading At Last vs Closing Price Cross (CPX)	Mandatory	New service		●			

*the implementation of this service for legacy Euronext markets will folllow a phased approach

- Order Types

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
(ix) Bilateral Transactions/Cross orders/BTF	Optional	Change of service		●	●	●	

- Other Trading Features

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Multi-Listed Instruments	Mandatory	Change of Service	●	●			

- Derivatives Features

Change	Change criticality	Type of change	Derivatives
(iii) Strategy Trading on Derivatives Markets	Optional	Change of service	●
(vii) Lot Multiplier	Optional	Change of service	●
(viii) Expiration Date	Optional	Change of service	●
(ix) Automated Market Reference (AMR)	Mandatory	Change of service	●
(x) Corporate Action Counter	Mandatory	Change of service	●

MyEuronext – The new Euronext Member Portal

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
MyEuronext portal	Mandatory	New Service	●	●	●	●	●

Regulatory Reporting

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Transaction Reporting	Mandatory	Change of service	●	●	●	●	●

Files and Reports

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
(i) Order to Trade Ratio (OTR) Reports	Mandatory	Change of service	●	●	●	●	●
(ii) Market Making Performance Reports	Mandatory	Change of service	●	●	●	●	●
(iv) Reconciliation / End of Day Files	Mandatory	Change of service	●	●	●	●	●

Collars and Surroundings

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Collars	Mandatory	Change of Service	●	●		●	●
Stressed Market Conditions (SMC) & Exceptional Market Circumstances (EMC)	Mandatory	Change of behaviour	●	●			

Open Interest

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Dissemination of Open Interest	Optional	Change of Service					●

Corporate Actions

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Corporate Actions model	Mandatory	Change of Service					●

Technical Changes

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Recovery After Failure	Mandatory	Change of Service	●	●	●	●	●
Enhanced Front-to-Back Reconciliation process	Mandatory	Change of Service	●	●	●	●	●

Session timetable

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives
Session timetables	Mandatory	Change of Service	●	●	●	●	●

4.2.2. Italian markets

Trading/OEG

- Connectivity to Optiq

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Logical Access (Trading Sessions)	Mandatory	Change of service	●	●	●	●	●	●
Throttling Mechanism	Mandatory	Change of service	●	●	●	●	●	●

- Core Trading Functionalities

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Cancel on Disconnect	Mandatory	Change of service	●	●	●	●	●	●
Order Mass Cancellation	Mandatory	Change of service	●	●	●	●	●	●
Self-Trade Prevention	Mandatory	Change of service	●	●		●	●	●
Execution prevention between Liquidity Providers	Mandatory	Change of service					●	
Controls on dealing capacity	Mandatory	Change of service	●	●	●	●	●	●
Closing and Official Price	Mandatory	Change of service			●		●	
Uncrossing Auction Price (random uncrossing)	Mandatory	Change of service	●	●		●	●	●
Quantity and Notional Value controls at Order Entry	Mandatory	Change of service						●
Indicative Matching Price validation at the end of Call phases	Mandatory	Change of service	●	●		●	●	●
Trading Halt	Mandatory	Change of service					●	
Request for quotes (RFQ)	Mandatory	Change of service		●		●	●	
Deferred publication for orders to execute wholesale transactions	Mandatory	Change of service	●	●				No longer available
RiskGuard Services & Pre-Trade Risk Controls	Mandatory	Change of service	●	●		●	●	●
Trading At Last vs Closing Price Cross (CPX)	Mandatory	Change of service	●	●		●	●	

- Warrants and Certificates

Change	Change criticality	Type of change	W&C	Cert-X (ETLX)
(i) W&C hybrid (Request for Execution) market model and other major features	Mandatory	Change of service	●	●
(ii) Knock-Out By Issuer, Knock-In By Issuer & Payment After Knock-Out	Optional	Change of service	●	●
(iii) Multiple MMs per ISIN	Optional	Change of service	●	●
(iv) Extended Hours for Warrants & Certificates	Mandatory	Change of service	●	

- Order Types

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
(i) Market Orders	Mandatory	Change of service	●	●	●	●	●	●
(ii) Market to Limit Orders	Mandatory	New service	●	●	●	●	●	No longer available
(iii) Unpriced Limit orders	Mandatory	Change of service	●	●	●	●	●	
(iv) Iceberg Orders	Mandatory	Change of service	●	●	●	●	●	No longer available
(v) Stop Orders	Mandatory	Change of service				●	●	●
(vi) (Limit) Stop-On-Quote	Optional	New service			●		●	
(vii) Quotes & Market Maker Flagging	Mandatory	Change of service	●	●	●	●	●	
(viii) Named orders	Mandatory	Change of service	●	●	●	●	●	
(ix) Bilateral Transactions/Cross orders/BTF	Mandatory	Change of service	●	●	●	●		●
(x) Client Price Improvement (CPI) / Request For Cross (RFC)	Mandatory	Change of service						●
(xi) Bundle Orders	Mandatory	Change of service						●

4 - SUMMARY OF MAIN CHANGES

▪ Other Trading Features

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Order Duration (GTD, GTC)	Mandatory	Change of service	●	●	●	●	●	●
Settlement calendar and Trades Settlement Date dissemination	Mandatory	Change of service	●	●	●	●	●	
Order Source Code	Mandatory	Change of service	●	●	●	●	●	
Bid-Only Trading for Warrants & Certificates	Optional	Change of Service			●		●	
Quoting Period	Optional	Change of Service			●		●	
Public Distribution Features	Mandatory	Change of Service	●		●	●		
MIC codes	Mandatory	Change of Service	●					
ATFund market	Mandatory	Change of Service		●				

▪ Derivatives Features

Change	Change criticality	Type of change	Derivatives
(i) Daily Settlement Price and Official Closing Price	Mandatory	Change of service	●
(ii) Exchange Delivery Settlement Price	Mandatory	Change of service	●
(iii) Strategy Trading on Derivatives Markets	Mandatory	Change of service	●
(iv) FIA Execution Source Code scheme (FIX Tag 1031)	Optional	New service	●
(v) Derivatives Market Making Model & Monitoring	Mandatory	Change of Service	●
(vi) Suspension due to Underlying	Mandatory	Change of Service	●
(vii) Lot Multiplier	Mandatory	Change of Service	●
(viii) Expiration Date	Mandatory	Change of Service	●
(ix) Automated Market Reference (AMR)	Optional	Change of service	●
(x) Corporate Action Counter	Mandatory	Change of service	●

Market Data

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Market Data Gateway	Mandatory	Change of Service	●	●	●	●	●	●

MyEuronext – The new Euronext Member Portal

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
MyEuronext portal	Mandatory	Change of Service	●	●	●	●	●	●

Regulatory Reporting

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Transaction Reporting	Mandatory	Change of Service	●	●	●	●		●
Order Record Keeping and Short/Long Code Management	Mandatory	Change of Service	●	●	●	●	●	●

Files and Reports

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
(i) Order to Trade Ratio (OTR) Reports	Mandatory	Change of Service	●	●	●	●	●	●
(ii) Market Making Performance Reports	Mandatory	Change of Service	●	●	●	●	●	●
(iii) Standing Data	Mandatory	Change of Service	●	●	●	●	●	●
(iv) Reconciliation / End of Day Files	Mandatory	Change of Service	●	●		●	●	●

4 - SUMMARY OF MAIN CHANGES

Collars and Surroundings

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Collars	Mandatory	Change of Service	●	●	●	●	●	●
Stressed Market Conditions (SMC) & Exceptional Market Circumstances (EMC)	Mandatory	Change of Service	●	●	●	●	●	●

Open Interest

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Dissemination of Open Interest	Optional	Change of Service						●

Corporate Actions

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Corporate Actions model	Mandatory	Change of Service						●

Post-Trade

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Post-Trade set-up	Mandatory	Change of Service	●	●	●	●	●	●
Trader ID	Mandatory	Change of Service						●
Give Up Process	Mandatory	Change of Service						●

Technical Changes

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Recovery After Failure	Mandatory	New Service	●	●	●	●	●	●
Disaster Recovery Site	Mandatory	New Service	●	●	●	●	●	●
Enhanced Front-to-Back Reconciliation process	Mandatory	New Service	●	●	●	●	●	●

Session timetable

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Session timetables	Mandatory	Change of Service	●	●	●	●		●

***

Some other changes are still under discussion. More information will be provided in due course, documentation will be updated accordingly.

4.3. CONNECTIVITY TO OPTIQ®

4.3.1. Logical Access (Trading Sessions)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Impact for legacy Euronext Markets

The current connectivity model based on Logical Access will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

The Optiq connectivity model based on Logical Access (Trading Sessions) currently in place for the legacy Euronext markets **will be extended to Italian markets** once they have migrated onto Optiq.

The Logical Access model used by Optiq is different from the one in place for Italian markets. While for Trading Sessions in the Italian markets the segregation is done by market (e.g. MTA, EGM, GEM, etc.), Optiq is designed **to support a "single liquidity pool" model across all markets and is managed by Euronext, per asset class**. This business model is at the heart of the mission of the Euronext Group and it is a prerequisite to facilitate cross-country access across all trading firms connected to Optiq.

In Optiq, the same Logical Access can be used to send technical instructions to the trading system for any Euronext market within a single asset class (also known as a "Segment"), where the trading firm has been authorised by Euronext.

The 'capacity' of the logical access (i.e. its throttling limits) is managed in Optiq at segment/partition level. Market participants must be aware of the throttling limits set on each Logical Access to properly define their required technical set-up once the Italian markets have migrated onto Optiq.

As mentioned previously, **one Logical Access gives a Trading Participant the ability to trade any Euronext market within a single asset class** (i.e. the segment) on which the firm has been authorised by Euronext. The capacity of the Logical Access applies to the asset class, not to an individual market.

The table below shows the association between the different Italian Markets and Optiq® segments:

Italian Markets	Optiq® Segments
Euronext Milan (MTA)	Equity
BIt GEM	
EGM	
ETLX Equities	
MIV	
TAH	Euronext Block (MTF)
ETF Plus	ETF & Funds
ATFund	
SeDeX	Warrants & Certificates
Cert-X (EuroTLX)	
MOT	Fixed Income
ExtraMOT	
Bond-X (EuroTLX)	
IDEM	Equity Derivatives
	Index Derivatives

Note:

- *Logical Accesses will not have a specific naming convention per market or segment (as opposed to what is currently in place for Italian markets).*

- *Currently, MOT and ExtraMOT instruments are traded via different Comp IDs depending on the settlement system associated to the instrument (domestic or ICSD). After the migration to Optiq they will belong to the same segment and be tradable via the same Logical Access.*

- *Currently, SeDeX instruments are traded via different Comp IDs depending on the settlement system associated to the instrument (domestic or ICSD). After the migration to Optiq, they will belong to the same segment and be tradable via the same Logical Access.*

- *Currently, all IDEM instruments (Equity and Index Derivatives) can be traded via the same SOLA User. After the migration to Optiq they will belong to **different** segments and therefore no longer tradable via the same Logical Access.*

Commercial details for connectivity services will be provided in due course.

*For further technical details please refer to the "Optiq® OEG Connectivity Specifications" available on the **IT documentation page**.*

4.3.2. Throttling mechanism

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

The existing Euronext throttling mechanism model will be implemented for the Italian markets. For details, please see section *Optiq® in a Nutshell*.

Some additional throttling features provided are:

- a limit to the length of the throttling queue;
- a limit to the number of messages that can be sent in a single burst of messages ('token' mechanism);
- a 'limit for excessive breaching' that triggers automatic disconnection for three (3) seconds in case the number of messages / bytes exceeds by multiple times the allowed rate.

For full details on the Optiq Cancel-On-Disconnect functionality, please refer to the "Optiq® OEG Connectivity Specifications" document.

Impact for legacy Euronext Markets

The current throttling mechanism in place will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

Currently on the Italian markets, messages breaching throttling limits are always rejected and throttling is managed at the Trading Session level (Comp ID for cash, SOLA User for Derivatives).

The throttling mechanism service currently in place for legacy Euronext markets **will be extended** in its current form to Italian markets once they have migrated onto Optiq.

Market participants will have to technically adapt to the throttling functionality as managed by Optiq, which will in any case offer a similar (more flexible) service level on Day 1.

4.4. CORE TRADING FEATURES

4.4.1. Cancel on Disconnect

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

The Cancel on Disconnect (CoD) functionality is currently available on legacy Euronext and Italian markets, however with some technical and functional differences.

On Optiq, a request from a participant to cancel an order in the case of disconnection is handled at the order entry level, for each individual order, according to the content of a specific field (called *Execution Instruction*).

The Execution Instruction field is not available in the Quote messages available on Derivatives markets. By default, live quotes are not persistent and are automatically cancelled in the case of disconnection.

The CoD functionality already available on Optiq will be extended to Italian markets.

For full details on the Optiq Cancel-on-Disconnect (COD) functionality, please refer to the "Euronext markets - Optiq® OEG Connectivity Specifications" document.

Impact for legacy Euronext Markets

The current CoD service will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

Cash markets

- Cancel on Disconnect is activated at the Comp ID (trading session) level;
- the participant can choose to have selected GTD orders excluded from CoD.

Derivatives markets

- The request to cancel an order upon disconnection is available at the order entry level, similarly to Optiq, using a dedicated value in the "duration type" parameter (order valid "while connected");
- For quotes, CoD is set once per session after logon ("disconnection instruction").

The CoD functionality currently in place for legacy Euronext markets **will be extended** in its current form to Italian markets once they have migrated onto Optiq.

Market participants will have to technically adapt to the Cancel on Disconnect functionality managed by Optiq, offered as of Day 1 for Italian markets.

4.4.2. Order Mass Cancellation

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Mass Cancellation is available for legacy Euronext Cash & Derivatives markets as well as on Italian markets, however with some technical and functional discrepancies.

The Mass Cancel functionality as currently available in Optiq will be extended to Italian markets. The functionality allows trading members to delete all active orders using a single command, and can be applied to:

- a selected instrument for Cash markets or a selected Contract for Derivatives markets;
- all instruments belonging to the same Trading Group (for Cash markets only).

Trading Participants also have the ability to restrict the Mass Cancel command to a finer level of granularity, that is:

- Only to orders within a specific "Exchange Market Mechanism" (EMM);
- Only to buy (or to sell) orders;
- Only to orders entered through the same Logical Access;
- Only to orders referring to instruments hosted in the same Optiq partition;
- Only to orders flagged with the same "Execution Within Firm Short Code".

*For more details, please refer to the "Euronext Markets - Optiq® OEG Client specifications - SBE Interface" and "Euronext Markets – Optiq® OEG Client specifications – FIX 5.0 Interface" documents available on the **IT documentation page**.*

Impact for legacy Euronext Markets

The current Mass Cancel functionality as described above will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

The current mechanism in place on Optiq **will be extended** to the Italian Cash and Derivatives markets.

4.4.3. Self-Trade Prevention

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service	●	●		●		●
Italian Markets	Mandatory	Change of service	●	●		●	●	●

Self-Trade Prevention (STP) was available for legacy Euronext markets as well as for Italian markets, however with some technical and functional differences.

The STP functionality already available on Optiq will be extended to the Italian Cash and Derivatives markets, with the exception of SeDeX and Cert-X.

Currently:

- On the legacy Euronext markets, trading members have to specify for each new order (or Quote on Derivatives) whether or not the order is subject to STP ;
- On the Italian markets, STP is configured at the level of each trading session – Comp ID and Trader ID.

Expected behaviour in a self-matching situation:

- **As part of the migration, for all markets where STP functionality will be made available (please refer to the table above), participants will be able to decide whether to cancel:**
  (1) only the incoming order,
  (2) only the resting order or,
  (3) both the incoming and the resting order, depending on the STP Type defined at the order entry level.

*For full information on the current STP functionality available in Optiq, please refer to the Euronext documents titled "Euronext Cash Markets – Optiq® Self Trade Prevention (STP)" and "Euronext Derivatives: How The Market Works" available on the **IT documentation page**.*

In Optiq, to be eligible for the STP mechanism, orders must originate from the same Member Code (FirmID) level and must be flagged as "House" or "Liquidity Provider".

Euronext recently extended the STP facility by enabling the "STP ID" field for both Cash and Derivatives markets. Participants can specify a user-defined STP ID at the order entry level so that only incoming and resting orders of the same FirmID with the same STP ID are eligible for the STP mechanism. With this enhancement, participants can benefit from a finer granularity, allowing them to segregate specific order flows (for example, all orders from the same trading desk could be tagged with the same STP ID) and therefore activate STP only across orders belonging to the same group.

Impact for legacy Euronext Markets

The above changes are being made **available for legacy Euronext Markets,** including:

- Further segregation offered with the STP ID to replicate the "group of CompIDs / TraderIDs" logic;
- Account type extension to "House" orders.

Self-Trade Prevention will continue to be available for the legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

The current mechanism in place for the legacy Euronext markets will be extended to the Italian Cash and Derivatives markets with the introduction of some functionalities from the current Italian model.

Note that the existing "reduce and cancel" option will not be available on Optiq.

Participants must be aware that:

- The STP functionality is applicable only to:
  - o House vs House
  - o LP vs LP
  - o House vs LP, unlike Italian markets where STP can apply also to Client orders;
- STP will be applied only if the two matching orders (from the same Firm ID) have the same STP ID attribute. Today, this is not necessary, as the STP behaviour for Italian markets is driven by the characteristics of the incoming order;
- The STP mechanism will apply during the Continuous and Continuous Trading At Last phases of the trading cycle;
- Quote messages are in the scope of the STP mechanism on the Derivatives markets only and are managed as orders (while in the Italian Derivatives markets, they have higher priority over orders);
- The STP ID will allow clients to replicate most of the set-up that they are currently using on Italian markets;
- On Warrants & Certificates, STP will be **decommissioned** due to:
  - o the current limited use on SeDeX/Cert-X
  - o the very infrequent usage of the feature on the hybrid market model (also known as the Request For Execution model).

4.4.4. Execution Prevention between Liquidity Providers

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not applicable							
Italian Markets	Mandatory	Change of service					● 4	

Currently, on the EuroTLX market, the "Execution Prevention across all firms" mechanism allows each Liquidity Provider (LP) to avoid trading with other LPs. This feature is activated

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[4] No CERT-X

using a specific trading capacity set at the Comp ID level: each time the LP sends a quote with trading capacity "Principal", trading between two LPs is prevented and the incoming order is cancelled; to trade, the two legs of the trade must be sent with trading capacity "Proprietary". This feature will not be implemented at the Phase 2 Go-Live

Impact for legacy Euronext Markets

The "Execution Prevention between LPs" mechanism **will not be available** on the legacy Euronext Cash & Derivatives markets. However, the provision of this feature on the legacy Euronext Fixed Income markets (in particular on a subset of Trading Groups) is **under evaluation**.

Impact for Italian Markets

The current "Execution Prevention across LPs" mechanism **will not be replicated** for the EuroTLX market.

4.4.5. Controls on dealing capacity

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	New Service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

As part of the migration, the consistency controls available on the current Italian Cash & Derivatives markets between the membership settings and the allowed account types and trading capacities will be introduced onto Optiq. Orders entered with inconsistent account type or trading capacity will be rejected.

Detailed mapping of the available membership roles and permitted account types and trading capacities will be provided in due course.

Impact for legacy Euronext Markets

Euronext will implement the same controls on legacy Euronext markets at a later stage. Members will be informed on a case-by-case basis of the relevant impact.

Impact for Italian Markets

The controls currently in place for dealing capacity **will be replicated with some minor differences** for Italian markets on Optiq.

Any order and/or quote sent by a participant to fulfil obligations under a liquidity provision agreement will have to be entered with account type set to "LP" (Liquidity Provider), otherwise it will not be accounted for in the calculation of related performance measures.

Orders and/or quotes with type set to "LP" (Liquidity Provider) will be accepted only on instruments where the participant is configured as a Liquidity Provider in Euronext systems.

On EuroTLX, members that act only as LPs, as per today, will only be able to trade on instruments on which LPs are authorised. They will not be permitted to send out any other kind of order on other instruments.

4.4.6. Closing and official price

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●		●		
Italian Markets	Mandatory	Change of service			●		● [5]	

On the Italian markets, the rules applied for the calculation of reference prices are currently different from those in place on legacy Euronext markets.

Information on how Closing prices are calculated and current values will be disseminated via reference data and market data (Optiq® MDG).

Impact for legacy Euronext Markets

The Closing Price **calculation** currently in place will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

For Warrants and Certificates on legacy Euronext markets, a new closing price algorithm will be implemented at a later stage.

Clients should be aware that, although the closing price calculation is not going to change, the mechanism built for publishing the closing price via MDG for Italian markets will be put in place also for legacy Euronext Markets, resulting in changes on the market data dissemination.

Impact for Italian Markets

For all Italian markets, with the exception of SeDeX & Cert-X, the algorithms to calculate and disseminate the "reference prices" as defined in the Borsa Italiana rulebooks will be implemented on Optiq.

For Warrants and Certificates trading under the RFE model (i.e. XMLI), the closing price will follow the same closing price algorithm which will be introduced on SedeX & Cert-X.

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[5] Cert-X only

4.4.7. Uncrossing Auction Price (& mechanisms)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●		●		●
Italian Markets	Mandatory	Change of service	●	●		●	●	●

The calculation of uncrossing auction price currently in use for legacy Euronext markets will be extended to the Italian markets. The auction price calculation algorithm available within Optiq will be extended to the Italian markets.

The criteria used by the system to determine the uncrossing price when two or more prices are available are based on the following characteristics:

1. Maximisation of the executable quantity, and;
2. Minimisation of the total quantity of buy and sell orders having prices equal to or better than the price in question, so they cannot be executed (the "imbalance" or "surplus")

In Optiq, when more than one price is available and meets the two conditions above, the uncrossing price is:

- for cash markets, the price that is closest to the reference price;
- for derivatives markets, the price that sits in the middle of the tradable price range meeting the conditions described above.

Impact for legacy Euronext Markets

The calculation of uncrossing auction prices currently in use in Optiq will continue to be available **with no change** on the legacy Euronext Cash & Derivatives markets.

For legacy Euronext model, as per the current Italian model, the **randomisation of the auctions** (random uncrossing), currently only in place for the opening auction, **will be further enhanced**. Random uncrossing will be implemented for all auctions following any call phase (opening call phase, intraday reservations and closing call phase for cash and at opening, intraday suspensions and reservations on instruments and contracts and halts for derivatives). It will be possible to set-up a random uncrossing to all types of Cash and Derivative products.

Impact for Italian Markets

Currently on Italian markets, a 4-step algorithm is applied for the determination of the uncrossing auction price, with differences in comparison to the equivalent Euronext algorithm.

The calculation of uncrossing auction price currently in use in Optiq **will be extended** to Italian markets.

For SeDeX and Cert-X, where the Request For Execution market model will be implemented, there will be no Auction Price. Instead of an auction, the Call phase will be followed by a Continuous Uncrossing and then by the Continuous phase.

4.4.8. Quantity and notional value controls at order entry

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory[6]	Change of service	●	●	●	●		
Italian Markets	Mandatory	New service						●

The specific controls at order entry currently available on Italian markets for Quantity, Size and Nominal Value on Warrants & Certificates[7] will be implemented on Optiq. Orders for which Quantity, Size or Nominal Value exceed predefined thresholds will be rejected. Existing order entry controls based on Notional Value that are applicable to derivatives contracts traded on IDEM will be discontinued instead.

Impact for legacy Euronext Markets

The application of additional controls on Quantity, Size and Nominal Value is **under evaluation** for the legacy Euronext markets. If applicable, confirmation of the change and full details will be provided in due course.

Impact for Italian Markets

The current controls on Quantity, Size and Nominal Value in place for Italian markets **will be extended** into Optiq. For derivatives traded on IDEM, controls on Notional Value will be discontinued.

4.4.9. Indicative Matching Price validation at the end of call phases

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivative
Legacy Euronext Markets	Mandatory	Change of service						●
Italian Markets	Mandatory	Change of service	●	●		●	●	●

The approach currently in place on Optiq will be extended to Borsa Italiana markets, with some enhancements for Derivative Markets in the introduction of two new trading safeguards for select contracts.

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[6] The application of Quantity, Size and Notional Value controls at Order Entry on the legacy Euronext markets is under evaluation

[7] On Warrants & Certificates, the Notional Value is the equivalent amount of underlying that the position in the W&Cs represents. For example, the notional value of 100 warrants (which could be worth €50) may be worth €1k (of the underlying). For the sake of clarity, there will be no control on notional value on Warrants & Certificates.

4 - SUMMARY OF MAIN CHANGES

On Optiq, the Indicative Matching Price at the end of the Call phase is validated against both the static and dynamic collars.

In the case that either the static or the dynamic collar is breached, a volatility reservation is triggered.

Impact for legacy Euronext Markets

Cash markets

The rules in place to validate the Indicative Matching Price at the end of the Call phase **will remain the same**.

Derivatives markets

The rules in place to validate the Indicative Matching Price at the end of the Call phase will remain the same, but two new trading safeguard mechanisms will be introduced in addition to the existing dynamic collars and FSP:

- Future Limit Interruption Protection (FLIP)
- Static Collars

Both of these will apply to selected contracts and will also trigger a reservation if the Indicative Matching Price breaches one of them or the dynamic collars.

Impact for Italian Markets

Currently on the Italian Cash and Derivative markets, the Indicative Matching Price (IMP) at the end of the Call phases is validated against the static collar parameter only (Y parameter).

Following the migration to Optiq, the current mechanism in place for legacy Euronext markets **will be extended** to Italian Cash markets.

On the Euronext Warrants & Certificates Request For Execution (RFE) market model, no Indicative Matching Price is calculated nor published. Therefore, there will be no IMP on SeDeX and Cert-X.

On the Euronext Derivative Markets, the mechanism that will be enhanced for Euronext Legacy will be the same that applies to Italian Derivative Markets.

4.4.10. Trading Halt

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not applicable							
Italian Markets	Mandatory	Change of service					●	

Currently on EuroTLX, if an order results in a collar breach, trading is halted (i.e. a Trading Halt session is triggered).

During a Trading Halt, members can only cancel the orders in the order book. The Continuous Trading phase is restored only when the trading conditions are met.

As a result of the migration, the Trading Halt session will be substituted with an Auction Call phase (similar to the volatility auction in place on MOT/ExtraMOT markets).

During the Auction Call phase, members will have the possibility to insert, cancel and amend orders in the order book. At the end of the Auction Call phase, a new auction price will be defined and the static and dynamic prices of the instruments will be updated consequently.

Impact for Italian Markets

The current Trading Halt mechanism in place for EuroTLX markets **will be replaced by the Reservation Period** onto Optiq.

4.4.11. Request For Quotes (RFQ)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	New Service				●		
Italian Markets	Mandatory	Change of service		●		●	●	

The current Request For Quote (RFQ) functionality available in Optiq for ETFs will be extended to Italian markets, as described in the Optiq functional and technical documentation.

The technical specifications are available in Connect.

Impact for legacy Euronext Markets

The current Request For Quote (RFQ) functionality in place for Euronext ETFs on Optiq is expected to be made available for selected Trading Groups on the legacy Euronext Fixed Income markets. The Trading Groups on which the feature will be activated will be communicated in due course.

Impact for Italian Markets

Currently, Borsa Italiana offers the Request For Quote (RFQ) functionality for ETF and Fixed Income markets. On ETFs, two different RFQ models are available (with or without the interaction with the Central Order Book), while on Fixed Income markets the RFQ does not interact with the COB.

A unique RFQ model, already developed and available in Optiq, will be adopted by the ETF and Fixed Income markets. The main features of the Optiq RFQ model will be as follows:

- Only the manual and anonymous RFQ model will be available;
- Interaction with the COB for all RFQs and for all sizes (both under and over the LIS threshold) will be available;

- The RFQ LP will have the ability to respond for a partial quantity of the RFQ;
- The RFQ Requestor will also have the ability to execute a partial quantity of the requested RFQ;
- Two new additional fields will be available: *"MAQ (Minimum Acceptable Quantity)"*, which corresponds to the minimum total size acceptable; and *"MES (Minimum Execution Size)"*, which corresponds to the minimum executable size for each execution;
- The matching engine returns to the RFQ Requestor the potential matching price (weighted average price, updated on every change on COB and RFQ answers) for the quantity requested: in order to validate, the RFQ Requestor must send a confirmation order with the average price it wishes to execute;
- RFQs will have the same Tick Size Tables as the order book, since Optiq does not have dedicated RFQ Tick Size Tables;
- RFQs will be subject to the same collars in place for the Lit Central Order Book;
- RFQ LP ranking per traded instrument will not available in the new model;
- The RFQ Issuer will no longer be able to select the Liquidity Providers that will receive the RFQ;
- The RFQ Issuer will no longer have the ability to set the duration of a RFQ; this parameter is set at the Optiq segment level and applies to all RFQs;
- For ETLX, RFQs will only be made available for Fixed Income (Bond-X) products.

4.4.12. Deferred publication for orders to execute wholesale transactions

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●				No longer available

Deferred publication available for negotiated transactions in legacy Euronext Equities and ETFs markets will be extended to Italian markets.

Impact for legacy Euronext Markets

This change is limited to the Italian markets specified in the table in order to provide harmonisation across all the Euronext markets where deferred publication is available.

Impact for Italian Markets

Post-trade deferrals i.e. deferred publication of Large-In-Scale (LIS) trades, currently available on the Italian Derivatives market (for bilateral LIS trades only), will **not** be available after the migration.

In line with MiFID II regulation, deferred publication will be available for negotiated transactions in Equities and ETFs (as per the functioning of the existing legacy Euronext markets).

4.4.13. RiskGuard Services & Pre-Trade risk controls

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service	●	●		●		●
Italian Markets	Mandatory	Change of service	●	●		●	●	●

Existing scope:

- Borsa Italiana currently offers pre-trade risk controls through MIT Exchange and SOLA, and also supports Sponsored Access Services for equities and ETFs.

- Euronext currently offers a number of pre-trade risk controls for the Derivatives markets through the RiskGuard service.

Pre-trade services currently provided by Borsa Italiana on Cash and Derivatives markets will be replaced by pre-trade risk controls offered through the Euronext RiskGuard service. RiskGuard will be enhanced in order to offer some of the pre-trade risk controls available in Millennium Exchange and SOLA (note that these may be technically different, due to the different architecture of the Optiq system).

Pre-trade controls and services being implemented and summarised here will be available for both legacy Euronext and Italian markets, through the FIX API. Clients should note that a User Interface is also available for the legacy Euronext Derivatives markets.

Risk managers will have the ability to set, amend and delete the following pre-trade risk controls:

- Suspend / Unsuspend access to the trading system for a controlled entity (so called "Kill Switch"), with the option to delete all open orders at the time the suspension is triggered;

- Limit the maximum size of an order (expressed in monetary value for cash markets, and in number of lots for derivatives);
- Block / Unblock, i.e. prevent / authorise the controlled entity to submit orders in dedicated contracts or instruments; the option is provided to delete all unexecuted orders on the contract or instrument at the time the block command is triggered;

- Limit the maximum long or short exposure of the controlled entity, taking into account all executed transactions for the day (Maximum Exposure Position or MEP), as well as unexecuted orders that are resting in the order book. This control is for future implementation for cash markets – additional information on the implementation timetable for the MEP control will be provided in due course;

Pre-trade risk controls are available to Clearing Members and Trading Members, with a different level of granularity (Member Code, Logical Access, Client Identification Short Code,

Execution Within Firm Short Code). The level of granularity may vary depending on the control.

Sponsored Access will be initially offered on Italian cash markets only. The key features of the service, similar to those currently available on the Italian markets, will include the following:

- Sponsored Access clients will be identified with dedicated member codes;
- Access permissions for Sponsored Access clients will be segregated from the permissions of the Sponsoring Member (they can be only a subset of the access permissions of the Sponsoring Member);
- Sponsored Access clients will be provided with dedicated Logical Accesses.

While this set of functionalities offers a similar level of control to those already in place for the Italian markets, market participants must be aware that several differences will be introduced with the migration. A dedicated user guide for RiskGuard for cash markets, for RiskGuard for derivatives markets, as well as the technical specifications is available on Connect.

Impact for legacy Euronext Markets

Currently, the RiskGuard service is only available for the legacy Euronext Derivatives markets. **The new features introduced with the migration of BITA markets will be also available to the legacy Euronext Cash markets**.

Sponsored Access will not be initially available for Euronext Cash and Derivatives markets.

Impact for Italian Markets

Sponsored Access (for Cash markets) will be provided via the RiskGuard functionality, with a different technical implementation due to the architecture of the Optiq platform.

While this set of functionalities will offer a similar level of controls to the Millennium and SOLA systems, market participants should be aware that several differences have been introduced with the migration.

4.4.14. Trading Venue Transaction Identification Code (TVTIC)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	New service	●	●	●	●		●
Italian Markets	No change							

As per MiFID II requirements, Euronext provides a unique trade identifier (Trading Venue Transaction Identification Code) that participants can use for end-to-end transaction reporting and reconciliation.

A new trade identifier has been implemented within Optiq. It will be used as the unique reference of a trade across the market chain, to support data integration, reconciliation externally and internally, and recovery in the event of outages.

This new Trade Unique Identifier is calculated by Euronext and made available in Saturn, Drop Copy, MDG, EOD File Service, RTS 22, RTS 24 and clearing real-time messages & reports. It is being implemented across all legacy Euronext and Italian market segments and systems.

The characteristics of the new Trade Unique Identifier are:

- 10 characters long;
- Available in a dedicated field of the Trade message;
- Unique per ISIN, MIC & currency over at least one month;
- Fully regulatory compliant.

Clients must use the reconciliation key indicated in this table:

CCP connected to the markets ↓	Borsa Italiana Markets	Oslo Børs Markets	Euronext Dublin	Euronext Amsterdam, Brussels, Lisbon & Paris
Default CCP □	Euronext Clearing	Interoperability	CBOE Europe	LCH SA
Euronext Clearing	TUI	N/A	N/A	N/A
LCH SA	N/A	N/A	N/A	Execution ID
LCH Ltd	TUI	TUI	N/A	N/A
CBOE Europe	TUI	TUIL*	TUIL*	TUIL*
SIX x-clear	N/A	TUIL*	N/A	N/A

*TUIL- Trade Unique Identifier Leg prefixed by B or S based on the side of the trade

Impact for legacy Euronext Markets

Before the migration to the new TUI in Q4 2022, clients were requested to calculate the TVTIC following guidelines provided by Euronext and using values provided in a number of fields in the trade messages.

The **new Trade Unique Identifier (TUI) field is now considered as the official TVTIC** provided by Euronext (clients will no longer be required to calculate the TVTIC). The new TUI facilitates the reconciliation of messages into one single field avoiding the need for clients to manage multiple concatenation. This will lead to a reduction of the risk of operational errors and simplify reporting to regulators.

In cooperation with the Central Counterparties (CCPs), the Trade Unique Identifier (TUI) will also fully replace the Execution ID for the front-to-back reconciliation for the following CCPs: CBOE Clear Europe, LCH LTD and SIX x-clear. As a result, Trading/Clearing member firms still using Execution ID for their front-to-back reconciliations will have to switch to the TUI for their reconciliation of trades.

Impact for Italian Markets

The new Trade Unique Identifier (TUI) **will be available for all Italian markets upon their migration onto Optiq and will replace the currently provided trade identifier**.

Apart from technicalities, there will not be any functional changes for clients of Italian markets (as the field is already provided in the trade message at order entry level).

TVTIC will be made available on Euronext Clearing (formerly CC&G) Trade Files and BCS (for cleared instruments).

4.4.15. Trading At Last vs Closing Price Cross (CPX)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	New service		●				
Italian Markets	Mandatory	Change of service	●	●		●	●	

The 'Trading At Last' (TAL) trading phase available in Optiq for the legacy Euronext Cash markets will be extended to the Italian Equity and Fixed Income markets and will replace the currently available CPX (Closing Price Cross) trading phase.

Impact for legacy Euronext Markets

Trading at Last has been introduced on legacy Euronext ETF markets.

Impact for Italian Markets

Although the two functionalities are similar, the Closing Price Cross (CPX) functionality ensures execution at the price of the closing auction for the current day, while the Optiq Trading at Last (TAL) phase ensures execution at the last available trade price for the instrument. So, unlike in the current situation, the execution price can be equal to:

▪ the uncrossing price of the last auction for the day; or

▪ if no valid auction price is available, the last traded price registered during the continuous phase; or

▪ the last adjusted closing price (in the absence of the two criteria above).

Two existing Time In Force (TIF) parameters currently available on the legacy Italian Equity markets will be decommissioned:

▪ insert orders only during CPX, i.e. Time in Force = Closing Price cross (CPX)

▪ in the closing auction and (if unexecuted) in the CPX / TAL phase i.e. Time In Force set to "ACP"

The TAL phase has been introduced on ETF and Bond-X markets.

On Equities and Fixed Income markets, the CPX phase will be replaced by the TAL phase.

4.4.16. Warrants & Certificates

This section focuses on the functional changes that will be introduced on the SeDeX and Cert-X markets in the context of the Italian markets migration to Optiq, with the implementation of the Request for Execution (RFE) model and other major features.

It therefore provides a high-level functional view of the model currently in use on the legacy Euronext Warrants & Certificates markets.

Impact for legacy Euronext Markets

Trading participants should note that no change to existing features will be implemented for the legacy Euronext Warrants & Certificates market model. We are currently evaluating whether the features (or a subset of the features) initially developed for SeDeX and Cert-X will be added to the legacy Euronext model. The RFE model and related features described below will continue to be available **with no change** on the legacy Euronext Warrants & Certificates markets.

Impact for Italian Markets

(i) The Warrants & Certificates hybrid market model (also known as the Request for Execution market model) and other major features

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service			●		●[8]	

As a result of the Optiq migration, **SeDeX and Cert-X will benefit** from the Request For Execution (RFE) model already in place on Euronext markets.

Euronext's existing market model, which is based on Central Order Book trading with active liquidity provision, will be extended to the Italian markets:

- Trades must take place within the Liquidity Provider bid-offer spread. Investors can trade against the LP or against each other, within the LP bid-ask spread (or, if the LP is in bid-only, within the LP bid quote and the virtual offer price (VOP) calculated according to rules described in the Guide to Parameters);
- When a potential match is detected in the COB, a Request For Execution (RFE) message is sent to the LP;
- Within a pre-defined time window (the RFE Delay), execution is frozen and the LP can provide up-to-date prices;
- When the answer to the RFE is received from the LP or at the end of the RFE Delay (if no answer to the RFE is received from the LP during the RFE Delay), matching happens by price-time priority;
- Trading is suspended if the Liquidity Provider is absent.

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[8] Cert-X Only

The following features already exist on SeDeX and/or Cert-X. Some will be maintained and available on both markets, which will have identical market models following the migration to Optiq. Some of these features will be added to the legacy Euronext markets:

- The direct distribution model will no longer be available on Italian markets at Phase 2 Go-Live, but will be made available at a later stage on both legacy Euronext and Italian markets;
- The possibility to list products for professionals only will remain available on Italian markets (Cert-X only);
- The Buy-Back feature (currently known in Italy as Bid-Only Quote-Driven) will be introduced on legacy Euronext markets;
- The 'Offer Only' mode will remain on legacy Euronext markets only.

Trading Reservation in the case the Liquidity Provider is not present in the orderbook

Currently on SeDeX, when the Liquidity Provider is not present in the orderbook, trading is automatically suspended (in other words an instrument falls into a *Freeze Period* phase) for some product types (Structured/Exotic Warrants, Leverage Certificates class A, Investment Certificates class B). During the *Freeze Period*, market participants can only cancel existing orders but are not allowed to insert or modify existing orders.

On other SeDeX product types (plain vanilla warrants, Leverage Certificates class B, Investment Certificates class A) and on the whole of the Cert-X market, if the Liquidity Provider is not present in the orderbook, continuous trading is not halted.

After the migration to Optiq, if the Liquidity Provider is not present in the orderbook, even on only one side (unless in bid-only mode), trading will be automatically halted (i.e. suspended). During the trading halt, market participants will be able to cancel, insert and modify orders.

The pure order-driven market model will be replaced by the hybrid market model (also known as the RFE market model) for both SeDeX and Cert-X.

For further information please refer to the "Euronext Cash Markets – Optiq® Kinematics Specifications document".

(ii) Knock-Out By Issuer, Knock-In By Issuer & Payment After Knock-Out

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service			●		●9	

KOBI, KIBI and PAKO features **will be extended** to the Italian Warrants & Certificates markets i.e. SeDeX & Cert-X.

Knock-Out By Issuer (KOBI)

KOBI allows issuers to deactivate a listed product via a dedicated LP command that triggers the suspension of the instrument when the product has been knocked-out. It greatly improves

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9 Cert-X Only

efficiency and reduces the risk of trading after a knock-out. It requires optional developments from LPs.

This feature increases the efficiency of the process in which LPs notify the market of a knock-out event.

The use of the KOBI message is mandatory for LPs that manage large quantities of products with intra-day KO events. In addition to KOBI, issuers are also required to send a KO communication via MyEuronext.

The delisting period will start from the end of the PAKO period (if any).

Knock-In By Issuer (KIBI)

KIBI enables LPs to activate (knock-in) an instrument for trading via an LP command. This feature allows issuers to start trading intra-day products initially admitted to the market but kept in an inactive status while waiting for the ideal market conditions to start trading.

Payment After Knock-Out (PAKO)

PAKO enables participants to redeem knocked-out products which have a residual value. PAKO greatly reduces the time necessary for investors to receive the residual value they may be owed, and also makes the process of residual value payment transparent. The PAKO period is initiated via an LP command.

(iii) Multiple MMs per ISIN

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service			●		● 10	

Currently:

▪ On SeDeX there can be only one Liquidity Provider per ISIN (with the addition of voluntary MiFID II Market Makers);

▪ On Cert-X there can be multiple Liquidity Providers on the same ISIN.

After the migration to Optiq, only one Liquidity Provider per ISIN will be permitted.

Additional MiFID II Market Makers and Secondary Liquidity Providers can be added upon request, either in Bid & Ask or in Bid-only. More precisely, MiFID II market makers can be activated upon submitting their request via MyEuronext on SeDeX only, as is the case currently. Secondary Liquidity Providers (if needed, only in Bid-Only) can be activated upon request with the consent of the issuer on both markets.

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[10] Cert-X Only

(iv) Extended Hours for Warrants & Certificates

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service			●			

Currently, SeDeX and Cert-X markets are open from 09:05 until 17:30 CET.

After the migration to Optiq, issuers on SeDeX will have the ability, at ISIN level, to choose for each of their products between:

- Two opening times (08:00 or 09:05 CET);
- Three closing times (17:30 or 20:30 or 22:00 CET).

4.4.17. Order types

(i) Market Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Market orders are currently available on both legacy Euronext and Italian markets with some technical and functional differences.

In order to provide harmonisation across Euronext markets, the current management of Market orders in Optiq will be applied to Italian markets.

Impact for legacy Euronext Markets

There will be **no change** to the treatment of Market orders for legacy Euronext markets as a result of the migration.

Impact for Italian Markets

Market orders will be managed the same way on the Italian markets as on the legacy Euronext markets.

The main differences between the model in place for the Italian markets and the Optiq model are the following:

Cash markets

- Market orders become persistent if not executed.

- Residual quantity management will be modified according to the current Optiq behaviour:
  - o The residual quantity of a standard Market order will remain available in the order book;
  - o The residual quantity will remain available for execution at the best of:
    - the last traded price (or the Last Adjusted Closing Price if the instrument has not traded yet)
    - the best limit price on the market order opposite side
    - the incoming order price, if the incoming opposite order has a limit price

Note: *the current behaviour of Market orders on Italian markets (i.e. the automatic cancellation of any unexecuted quantity at order entry) can be reproduced by setting the time in force of an Optiq Market order to 'Immediate or Cancel';*

- It will be possible to enter Market orders during auctions (not currently possible on the Italian ETF market);

- Market orders on Warrants & Certificates, which are currently not available on Italian markets, will be available.

Derivatives markets

- The unexecuted quantity of a Market order is automatically cancelled, while on IDEM (unless the IOC parameter has been set at order entry level) it is automatically converted into a limit order at:
  - o The last price at which the Market order has been partially executed, if entered during the continuous phase; or
  - o If entered during the pre-opening phase, at the opening auction price when transferred to the continuous phase.

Unlike in the current IDEM set-up, Market orders are always rejected during the Call phase.

(ii) Market to Limit Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	New service	●	●	●	●	●	No longer available

The current Optiq model on Market Limit Orders will be applied to the Italian Cash market with the introduction of the "Market to Limit" (MTL) order type. The key features for the processing of Market to Limit orders are:

- In the Uncrossing phase: during the order accumulation periods (Call phase), Market to Limit orders are entered into Optiq with the indication "Market To Limit". During uncrossing, MTL orders are priced at the Uncrossing Price. The unexecuted part will remain in the Central Order Book at the uncrossing price. For securities which are traded by uncrossing, a Market to Limit order that has not been executed at all during an uncrossing remains in the Central Order Book for the next uncrossing as a Market to Limit order;

▪ In Continuous trading: at order entry, a Market to Limit order is converted into a Limit order at the best bid price (for sell orders) or best ask price (for buy orders). Consequently, a matching order is needed so that it can trade. Failing this, the order is rejected.

For full details of this order type, please refer to the Euronext "Trading Manual" at paragraph

Market to Limit orders will not be available on the Warrants & Certificates markets (Request For Execution market model).

<table>
<tr><td colspan="2" align="center">**Impact for legacy Euronext Markets**</td></tr>
</table>

There will be **no change** to the treatment of Market to Limit orders for the legacy Euronext markets as a result of the migration.

<table>
<tr><td colspan="2" align="center">**Impact for Italian Markets**</td></tr>
</table>

Optiq management of Market to Limit Orders **will be applied to Italian Cash markets**.

On the Italian Derivatives markets, Market to Limit Orders **will no longer be available**.

(iii) Unpriced Limit orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets			No change					
Italian Markets	Mandatory	Change of service	●	●	●	●	●	

The "Unpriced Limit Order" order type currently available on the Italian Cash markets **will be discontinued**.

The 'unpriced limit' order type currently available on Italian Cash Markets was designed to offer the possibility to insert an unpriced order to be converted into a limit order within the best bid offer (1 tick above the best bid for buy order, 1 tick below the best offer for sell orders) available in the central order book at the point of the receipt of the order by the matching engine.

(iv) Iceberg Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets			No change					
Italian Markets	Mandatory	Change of service	●	●	●	●	●	No longer available

Iceberg orders are currently available on both the legacy Euronext markets and the Italian Cash markets, however with some technical and functional differences.

The current Optiq management of Iceberg orders will be applied to Italian Cash markets.

Impact for legacy Euronext Markets

Iceberg orders will be available on Euronext Cash markets **with no change**.

Impact for Italian Markets

Iceberg orders will also be introduced on the EuroTLX Market.

Derivatives

On the Italian Derivatives markets, Iceberg orders **will no longer be available**.

Cash

With the migration to Optiq, the following changes in comparison to Millennium Exchange will be introduced on the Italian Cash market:

- If the total value of the Iceberg order is below the size prescribed by MiFID II (**10,000€**), the order will automatically be converted into a Limit order (currently on Italian markets, the order would be rejected);
- It will be possible to inject an Iceberg order during Auction periods, in addition to during Continuous trading. Iceberg orders cannot be entered during the Pre-Opening phase on Italian Cash markets;
- In the case of unexecuted quantity at Uncrossing, Iceberg orders are moved to the Continuous trading phase without any change of price, quantity and disclosed/hidden quantity conditions;
- When an opposite side order aggresses the order book:
  o The displayed quantities of all orders at the same price are first executed on time priority
  o The hidden quantity of remaining Iceberg orders (if any) is executed for the total amount according to the order's time priority (currently on Italian markets, the remaining Iceberg orders are executed using a pro-rata allocation criteria);
- Iceberg orders entered during auctions will be automatically transformed into a transparent Limit order (not rejected) if they are below the minimum MiFID II LIS order size;
- If more Iceberg orders are aggressed at the same price, the allocation rule will move from pro-rata to time priority.

For full details regarding this functionality in Optiq, please see the Euronext "Trading Manual"

(v) Stop Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service				●	●11	●

A new order type for derivatives markets, the Stop order, will be developed on Optiq.

The Stop order is an inactive order that is triggered (sent to the Central Order Book) when the last trade price reaches a *Trigger Price* specified at order entry. Some additional information:

▪ The only available *Trigger Price* will be the last trade price (Stop at Bid / Ask prices will not be available);

▪ The *Trigger Price* will not be validated at Stop Order entry but, the Stop Order Limit Price will be validated when the Stop Order is triggered;

▪ Two validity types (also known as order duration) are specified in the order entry message:
  o One for the un-triggered Stop (Day, GTD or GTC); and
  o One for the order that results from the Stop Order being triggered (Day, GTD or GTC);

▪ Stop Orders will be available during Call phases; in this case, the Stop order can be triggered by a validated call price and will not take part in the uncrossing process but will enter the Central Order Book immediately afterwards;

▪ Price collars will be applied when the Stop Order is triggered.

Full documentation on this new order type will be provided in due course.

Impact for legacy Euronext Markets

Stop orders will not be initially available for Euronext Derivatives markets. The current Stop order functionality on the Euronext cash markets will continue to be available with no change.

Impact for Italian Markets

On the Italian Derivatives markets, the existing Stop order functionalities will be replaced by the new order type which will be developed in Optiq as per description provided above.

On the Italian Fixed Income Markets, Stop Orders will be introduced (not currently available).

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[11] Bond-X only

(vi) (Limit) Stop-On-Quote

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	New service			●		●	

The existing (Limit) Stop-On-Quote order implemented on Optiq will be extended to the Italian Warrants & Certificates markets (SeDeX & Cert-X).

Impact for legacy Euronext Markets

The current (Limit) Stop-On-Quote order functionality will continue to be available **with no change** on the legacy Euronext markets.

Impact for Italian Markets

The activation of the (Limit) Stop-On-Quote functionality is triggered when a Liquidity Provider's quote reaches a certain pre-defined threshold.

(vii) Quotes & Market Maker Flagging

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	

The Quoting and Market Making Flagging model in place on the legacy Euronext Markets will be extended to the Italian Markets.

Impact for legacy Euronext Markets

The current Quote and Market Making flagging functionality will continue to be available **with no change** on the legacy Euronext markets.

Impact for Italian Markets

On the Italian Cash markets, several voluntary liquidity provision schemes must today be fulfilled by entering two-sided quotes (MiFID II Market Makers can fulfil their obligation using single orders instead and using dedicated Trading Sessions for this specific trading activity).

In Optiq, quote messages are not supported for Cash markets (except for Warrants & Certificates), and the identification of orders inserted under a liquidity provision agreement (of commercial or regulatory nature) is done by using the dedicated "LP" account type.

The current Optiq behaviour will be extended to Italian Cash markets, and all liquidity provision activity will be performed using normal orders, tagged appropriately with the LP account type. Monitoring of liquidity providers' trading activity will remain unchanged.

On the Italian Warrants & Certificates markets (SeDeX & Cert-X):

- Liquidity Providers will be required to send the current Bulk Quote functionality already available on Optiq. It allows them to send a single message to update up to 150 pairs of quotes, increasing their efficiency in updating prices;

- Market Makers and Secondary Liquidity Providers will use normal orders, tagged appropriately with the "Market Maker and Secondary Liquidity Provider" account type.

(viii) Named Orders/Quotes

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not applicable							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	

The "Named Order/Quote" type currently available on the Italian Cash markets (and in use for some of the Specialist roles currently in place) will be discontinued as a result of the migration. This order type is not available for the legacy Euronext markets.

(ix) Bilateral Transactions/Cross orders/Block Trade Facility

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service		●	●	●		
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

This section gives details of the functional changes linked to bilateral and cross transactions on Cash markets, as well as Wholesale trading functionality on Derivatives, which will be implemented on Optiq as part of the Optiq migration.

For these pre-negotiated transaction types, the current Optiq model will be extended to the Italian Cash and Derivatives markets. In addition, the service will also be extended to some legacy Euronext markets.

Impact for legacy Euronext Markets

The existing Euronext Trade Confirmation Service (TCS) **will be extended** to cover negotiated transactions in illiquid non-equity Cash instruments, i.e. Fixed Income and ETCs/ETNs

In addition to that, some adjustments are being introduced related to price controls on the execution price of TCS transactions.

Impact for Italian Markets

Functional changes on Cash markets

The existing price controls in Optiq will be adapted to replicate the price controls currently available in the Italian Cash markets, mainly for negotiated transactions in liquid instruments and illiquid instruments (only for Fixed Income) and LIS trades. This change will allow the introduction of:

- new workflows for the execution of non-price-forming bilateral transactions (volume-weighted and delta neutral trades);
- deferred publication for Equity markets and ETFs transactions;
- possibility to report bilateral transactions before market open.

Cash markets: the "guaranteed cross / principal trades" and the TCS functionalities in use by Euronext will replace the cross and BTF order types currently available on the Italian Cash markets. In order to cover areas where these functionalities do not match the current services offered on Italian markets:

- TCS will be enhanced to support bilateral transactions below large-in-scale for illiquid, non-equity cash instruments (currently not supported);
- some adjustments will be introduced as concerns price controls on the execution price of TCS transactions.

With the adoption of TCS:

- deferred publication for equity and equity-like instruments will be introduced, as well as additional trade types for equities such as volume-weighted price transactions (subject to regulatory approval of the related pre-trade transparency waiver);
- the counterparties of TCS transactions will have to confirm their declarations within a predefined time window, otherwise the declaration will be cancelled. This time limit is currently not present on the Italian Cash markets;
- most of the existing price controls linked to real-time best-bid-offer will instead be linked to the last trade price for the day. Allowed price deviations will be reviewed accordingly.

For full details on the current TCS supported functionalities, please refer to the document titled "Euronext TCS Trading Manual".

The adoption of TCS will support the introduction of additional functionalities, while requiring participants to adapt their systems to a new execution workflow.

Full details on the described enhancements will be provided in due course.

Functional changes for the Italian Derivatives markets

Optiq provides trading participants with a sophisticated and powerful Wholesale Trading service that will be extended to the Italian Derivatives markets. The service removes a number of constraints currently in place on the Italian markets on submission of pre-negotiated trades, allowing for combinations of multiple counterparts and multiple instruments.

This will result in some functional changes compared to the current negotiated transactions management, including:

- Introduction of a new single order type that will replace cross, BTF and bundle orders (the wholesale trade message supports within a single message all types of negotiated transactions);
- Ability for a Member Firm (*Initiator*) to:
    - enter negotiated trades filling both sides of the trade (buy *and* sell)
    - enter one side (buy *or* sell) of a set of negotiated trades, receiving back from the trading platform a "*Transaction ID*" to be shared with other counterparts (*Reactors*) that must then enter their other sides of the negotiated trades (opposite to the ones entered by the *Initiator*);
- Wider set of price validation conditions configurable (based on dynamic collars, daily or lifetime high/low prices for each individual instrument), applied when the first side of the negotiated trade (i.e. *initiator side*) is received (in the case of a LIS strategy trade, each individual constituent price is checked against the overall strategy price submitted based on the strategy formula);
- Size controls configurable in lots only and executed on the initiator side;
- In the case of a LIS strategy trade, the *Initiator* must select the code of the applicable exchange known strategy and provide the overall price and volume of the LIS strategy trade; the *Reactor* can react on an individual instrument or on all instruments of a LIS strategy trade
    Note: In the case of a LIS Strategy transaction, it is not necessary for the strategy to be actually created as a tradable instrument on the Central Order Book (COB), with the exception of Delta-Neutral Strategies (for submission of a Delta-Neutral as a LIS Strategy the explicit creation of such strategy in COB is required);
- Wholesale transactions must be confirmed within a pre-defined time period after reception and validation of the initiator side, otherwise the proposed trade will be automatically deleted;
- Deferred publication will no longer be supported;
- Third-party order execution functionality (Inter Dealer Broker (IDB) and Non Executing Broker (NEB) workflows) will be decommissioned.

For full details on the Optiq wholesale trading functionality, please refer to the "Euronext Derivatives: How The Market Works" document.

(x) Client Price Improvement (CPI) / Request For Cross (RFC)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

The Request For Cross (RFC) functionality available for the legacy Euronext Derivatives markets will be extended to the Italian Derivatives market, replacing the Client Price Improvement (CPI) functionality.

Impact for legacy Euronext Markets

The current RFC functionality will continue to be available **with no change** on the legacy Euronext Derivatives markets.

Impact for Italian Markets

The Request For Cross (RFC) functionality offers a similar level of service to the Client Price Improvement (CPI) functionality, however with some additional features, listed below:

- All combinations of Account Type are allowed, i.e. Client vs. House , Client vs. Client, House vs. House);
- Two uncrossing algos can be configured within the Optiq Matching Engine at contract level:
  o Standard RFC: no priority is given based on the Account Type combination
  o Client Priority RFC: specific priorities are applied depending on the Account Type combination.
- Once the RFC initiator submission is checked and accepted, it will be published via a real-time Market Data message whose content depends on the uncrossing algo configured for the product;
- Possibility to configure RFC reactor minimum quantity;
- Possibility to prevent self-trading.

For full details on this functionality, please refer to "Euronext Derivatives: How The Market Works" document.

(xi) Bundle Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not applicable							
Italian Markets	Mandatory	Change of service						●

The Bundle Order feature currently available on the Italian Derivatives markets will be **decommissioned** and replaced by the Optiq strategy trading functionality (please refer to Strategy Trading session for further information).

4.4.18. Order duration (GTD, GTC)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●[12]	●

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[12] Cert-X only

GTD (Good Till Date) and GTC (Good Till Cancel) orders are standard order types, available on both the legacy Euronext markets and the Italian markets; however they have small differences related to the duration of such orders.

Impact for legacy Euronext Markets

GTCs and GTDs will continue to be available **with no change** on the legacy Euronext markets.

Impact for Italian Markets

The maximum duration of GTC and GTD orders on Italian markets will be harmonised with the maximum duration of such orders on all legacy Euronext markets, that is

- 364 days for GTD
- 365 days for GTC

Currently, GTD/GTC orders have a 30-day lifetime on the Italian Cash markets; on the Italian Derivatives market, there is no time limit other than the instrument series expiry date).

Clients should note that GTD orders will not be (or are not for markets already live on Optiq) available on TAH, BItGEM, SeDeX and EuroTLX.

4.4.19. Settlement Calendar and Trades Settlement Date dissemination

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	

The current legacy Italian Cash markets settlement calendar structure, based on settlement currency, settlement systems and CCP, where applicable, will be implemented in Optiq.

Impact for legacy Euronext Markets

Planned changes related to the Settlement Date **will not impact** legacy Euronext markets.

Impact for Italian Markets

Currently on the Italian markets, the Settlement Date is provided in each trade message received by participants. After the migration to Optiq, the Settlement Date for each traded instrument for a given trading day will be provided at the beginning of the trading day via Reference Data files and will be disseminated for each trade at the end of the trading day in the trades file. During the day the participant will receive the executed trade message without the settlement date.

4.4.20. Order Source code

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not Applicable							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	

On the Italian Cash markets, participants are required to provide information, at the order entry level, about the category of order flow that is entering the trading system, using a field named "*Order Source*", which must be populated with one of the following values:

- "Market participant that deals on own account";
- "Institutional client of the market participant";
- "Retail client that avails itself of an orders router different from the market participant";
- "Institutional client that avails itself of an order router different from the market participant";
- "Retail client of the market participant".

This field is not linked to existing European or domestic regulations and was introduced by Borsa Italiana in the past to collect additional information on the nature of the order flows reaching its trading system.

This information at order entry will be **discontinued**.

Impact for legacy Euronext Markets

A new optional field will be added to the order entry message. Member Firms will be allowed to leave the new field empty.

Impact for Italian Markets

The non-standard request for information will be removed from the order entry process, reducing complexity for market participants.

4.4.21. Bid-Only trading for Warrants & Certificates

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service			●		●	

The Bid-Only trading mechanism currently available in Optiq for legacy Euronext Warrants & Certificates markets will be extended to the Italian markets.

<div style="text-align: center">**Impact for legacy Euronext Markets**</div>

The functionality will continue to be available **with no change** to Liquidity Providers on the legacy Euronext Warrants & Certificates markets.

<div style="text-align: center">**Impact for Italian Markets**</div>

Currently, on the SeDeX market:
- When the Specialist acts in Bid-Only, trading is allowed in the range determined by the (Bid) quote of the Specialist and an upper limit based on the applicable price collars;
- Specialists wishing to change their specialist status from Bid & Ask to Bid-Only (interday or intraday) need to send an email request to Borsa Italiana, which processes the change manually.

After the migration to Optiq:
- In the case of a Bid-Only Liquidity Provider, trades can only be executed in the price range between the Bid quote of the Liquidity Provider and a Virtual Offer Price determined according to pre-defined and public parameters;
- Liquidity Providers on Optiq's RFE market model can change their LP status to Bid-Only via an Optiq LP command and can resume their Bid & Ask status by sending both Bid & Offer quotes again.

In addition to the above, the currently available Bid-Only Quote Driven Functionality will be replaced by the Bid-Only Before Buy Back one with non-relevant functional differences.

4.4.22. Quoting Period

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service			●		● 13	

Both SeDeX and EuroTLX currently have a Quoting Period, which will be replaced by the Optiq Call phase only for Bond-X and Equity EuroTLX segments.

<div style="text-align: center">**Impact for legacy Euronext markets**</div>

Mechanisms similar to the Quoting Period currently available will continue to be available **with no change** on the legacy Euronext markets.

<div style="text-align: center">**Impact for Italian Markets**</div>

SeDeX and Cert-X

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[13] Not on Cert-X, only on Bond-X and Equities

The quoting period on SeDeX and Cert-X will be replaced by the Optiq Call phase during which all market participants can insert/modify/cancel orders.

EuroTLX Equities and Bond-X

The Quoting Period is the starting phase/session of each instrument in the EuroTLX market. This phase is dedicated to Liquidity Providers and is enabled on each individual instrument. During this phase, only the authorised Liquidity Providers can insert orders, while other members cannot submit orders. Trading is always prevented during the quoting period and in the case of potential matching between two LPs' orders, both orders are cancelled.

At the end of the quoting period, all active orders automatically move to the Continuous phase.

The following changes will be introduced:

- The existing Quoting Period will be replaced by a dedicated new phase for Liquidity Providers only ("Core Call" session);
- Key points for the Core Call session:
  - No uncrossing/no trading
  - Core Call session is available only for Liquidity Providers
  - Duration of the call is configurable;
- During the Core Call session, only orders submitted by Liquidity Providers will be accepted by the system;
- At the end of the session, as scheduled in the trading cycle pattern, no auction/uncrossing will happen, and instruments will move to Continuous phase;
- When potential matching exists between an Incoming order and a Resting order, the Incoming order will be rejected and the Resting will be cancelled.

4.4.23. Public distribution features

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●		●	●		

In order to continue to provide equivalent features post-migration, "Issuing and Buyback" functionalities will be implemented into Optiq for Italian markets.

Impact for legacy Euronext Markets

There will be no change for legacy Euronext Markets.

Impact for Italian Markets

"Issuing and Buyback" (in particular: *Takeover BID*, *Unexercised Rights management* and *IPO management*) functionalities are currently available on the Italian Markets in order to manage the new issuances via the trading platform, as well as the buyback of the already listed ones. Different models are currently available (continuous/auctions trading models).

Public distribution on SeDeX will no longer be available. Introduction of the feature might be considered at a later stage.

These functionalities will be implemented in Optiq:

Equity public offers (IPOs)

- Participants in the IPO/takeover bid will be able to insert only buy orders, without a limit price, which will remain unexecuted in the order book till the end of the subscription period. The order book will not be visible through market data.
- At the end of the subscription period, the available buy orders will be matched against an opposing sell order, at the final IPO price, inserted by the Assigned Broker. This sell order will be executed against the available buy orders, using a random allocation scheme, consistent with the minimum allocation lot for the IPO, in the case that total buy quantity is bigger than the order sell quantity. Trade messages will be disseminated in market data at execution.
- In case of IPOs with multiple public offers reserved for different categories of investors, each tranche will be handled using a dedicated ISIN code.

Takeover bids

- Participants in the takeover bid will be able to insert only sell orders, without limit price, which will remain unexecuted in the order book until the end of the subscription period.
- The order book will be visible through market data.
- At the end of the subscription period, the available sell orders will be matched against an opposing buy order, at the final takeover bid price, inserted by the Assigned Broker. In the case of a partial tender offer, a pro-rata allocation scheme will be applied at the uncrossing. Trade messages will be disseminated in the market data at execution.

Unexercised right offerings

A dedicated market model will be introduced in this Optiq release in order to manage unexercised right offerings, according to Italian Law. Dedicated trading groups will be set up and will host the instruments available for this service. The market model will be as follows:

- Auction call from 07:30 to 09:00 CET with random uncrossing at 09:00 CET for a minimum of two days, except in the case of early closure (i.e., full amount of unexercised rights being sold).
- Participants will be able to insert only buy orders: they must be market or limit orders
- A sell order will be inserted by the Assigned Broker at the beginning of the auction.
- The order book will be visible in market data.
- The uncrossing is executed by price-time priority. After the uncrossing, the auction call is closed, therefore no order entry will be possible.
- Any remaining sell quantity will be made available the following day. The process is reiterated until all available sell quantity has been sold, or until the end of the offer period.

Fixed Income public offers (Distribution)

- The current Distribution models for the issuance of Italian Government Bonds and Corporate Bonds through the trading platform will be available in Optiq.
- New issuances can be managed both in Continuous Trading mode and in Auction mode; a combination of the two can also be used.
- Participants in the IPO will be able to insert only buy orders, without a limit price, and validity Good Till Cancel (GTC).
- The Assigned Brokers (dealers appointed for the Distribution) must send Limit Orders with Order Price equal to the price defined in the Notices issued to the market.
- In Continuous Trading mode, orders are matched and executed on a continuous basis against the orders already in the book using the matching algorithm associated with the Continuous Trading phase.
- In Auction Trading mode, at the end of the subscription period, the available buy orders will be matched against an opposing sell order, at the final IPO price, inserted by the Assigned Broker. This sell order will be executed against the available buy orders, using one of the following allocation schemes in the case where the total buy quantity is greater than the order sell quantity:
  - random allocation scheme, consistent with the minimum allocation lot for the IPO;
  - random allocation scheme, consistent with the pro-rata allocation;
  - random allocation scheme, consistent with a minimum allocation lot followed by a pro-rata allocation.
- For a given operation, issuers may define a maximum investor allocated quantity for retail investors, regardless of the trading member that sends the orders.
- In the case of an IPO with multiple public offers reserved for different categories of investors, each tranche will be handled using a dedicated ISIN code (eg. BTP ITALIA).
- Order Update (1002) and Market Update (1001) messages must be disseminated upon order reception, modification, cancellation.
- Trade messages will be disseminated in market data at execution.

4.4.24. MIC Codes

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●					

Together with the migration of Italian Markets onto Optiq, **the MIC Code of the BIT GEM market** (Global Equity Market) **will change**. The new MIC Code for **BIt GEM** will become effective together with the go-live of phase 1 of the Migration.

Impact for legacy Euronext Markets

No changes to MIC codes are planned for legacy Euronext Markets.

Impact for Italian Markets

Apart from the change on Bit GEM, **no other change to MIC codes are planned for Italian Markets**.

4.4.25. ATFund Market

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Not applicable							
Italian Markets	Mandatory	Change of service		●				

ATFund market will migrate to Optiq but the market model will change, in particular ATFund will be available on the Euronext's **Trade Confirmation System (TCS)**.

Impact for legacy Euronext Markets

ATFund is an Italian market that will move to Optiq with a different model, this does not imply any impact on legacy Euronext Markets.

Impact for Italian Markets

One of the main difference from the current and the new market model for ATFund is that while currently only the difference between the buy and sell quantities of orders submitted by other market participants shall be taken up by the Appointed Intermediary, with the new model **only the Appointed Intermediary throughout the open market can match buy/sell orders** submitted by other market participants.

Trading Cycles are shown in the below picture:
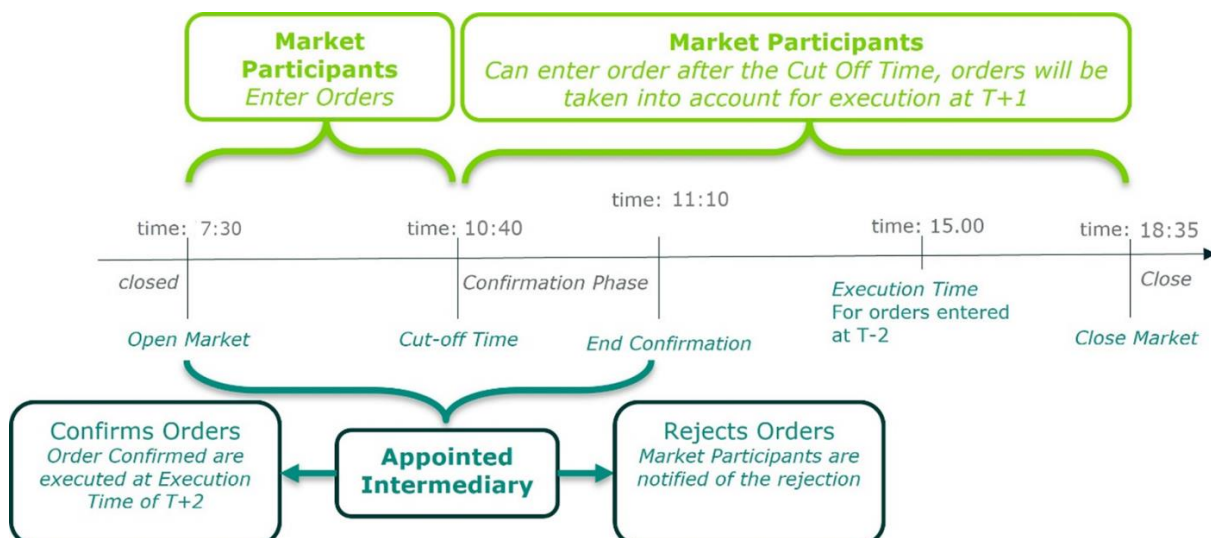
Some further details below:

- Market Participants can enter order between 7:30 and 18:35.
- At 10:40 (*Cut Off Time*), till 11:10, the **Confirmation Phase** starts, during Confirmation Phase the **Appointed Intermediary** can:
  o Accept Orders (that will then be executed at 15:00 – *Execution Time* – of T+2)
  o Reject Orders (Market will be notified of the cancellation)
- Orders entered by market participant after *Cut Off Time* (10:40) will be taken into account the following trading day
- The **Appointed Intermediary** should communicate the **NAV price** by 15:00 T+2
- At 15:00 T+2 (*Execution Time*) orders will be executed at NAV Price

TCS is available via both Optiq OEG (SBE and FIX) and via TCS web platform.

It is important to notice that **the Settlement process unchanged**.

4.4.26. Multi-Listed Instruments

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●				
Italian Markets	No change							

Before the migration of Italian markets to Optiq, on legacy Euronext Markets the same Equity or ETF ISIN could be traded on multiple markets (multiple MIC codes).

In this case, the *Market of Reference* was used to identify the main MIC code; the same Mnemonic Code was not replicated in the Standing Data Files for MICs different from the *Market of Reference.*

With the migration, Italian instruments that were already listed on legacy Euronext markets have been added:

- as *standalone* instruments, that is without specifying the *Market of Reference*
- with a MIC Code that potentially overlaps with an existing MIC Code.

Note that there is no change on Warrants & Certificates markets: the same ISIN cannot be listed on multiple orderbooks.

Impact for legacy Euronext Markets

Clients trading on legacy Euronext markets should be prepared to:

- see given Mnemonic Codes multiple times in standing data files instead of unique Mnemonic Codes
- receive multi-listed ISINs without the *Market of Reference*

4.4.27. Financial Derivatives

This section focuses on the functional changes that will be introduced on legacy Euronext and Italian Derivatives markets in the context of the Borsa Italiana migration to Optiq.

(i) Daily Settlement Price and Official Closing Price

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

On Italian markets, the calculation of the Daily Settlement Prices and Official Closing Prices are done by Euronext Clearing, and then are received by Borsa Italiana and re-distributed via the SOLA platform for all instruments. There is currently no distinction between the Official Closing Price and the Daily Settlement Price, unlike what is in place for Euronext Legacy products.

On Euronext Legacy side, both the Daily Settlement Price and the Official Closing Price are calculated by Euronext and distributed to the market directly via the MDG public feed. They are then disseminated to clearing and taken by the clearing house for their operations. This will be the process adopted for Italian Markets after the migration.

Impact for legacy Euronext Markets

The process in place for Daily Settlement Price and Official Closing Price **will remain the same with no change for legacy markets**.

Impact for Italian Markets

For all Italian markets, the calculation of settlement prices and official closing prices will be conducted by Euronext, with the publication in MDG (and MDG Lite) of both these prices for all listed instruments.

The daily settlement prices will be disseminated to Euronext Clearing and will be used by them for operational and risk management purposes.

(ii) Exchange Delivery Settlement Price

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

On Euronext Legacy markets, the Exchange Delivery Settlement Price (EDSP), or the expiry price of the products, is calculated by Euronext, according to the product specifications.

This process is similar on Italian Markets and will remain the same, with some improvements with regards to the dissemination of these prices to members, by adopting the current process in place for Euronext Legacy Markets.

Impact for legacy Euronext Markets

The process in place for Exchange Delivery Settlement Price **will remain the same with no change for legacy markets**.

Impact for Italian Markets

Currently on Italian markets, a selection of expiry prices are disseminated via market messages or exchange notice.

The functionalities for dissemination of these prices currently in use in Optiq **will be extended** to Italian markets.

All expiry prices for all individual instruments will be disseminated via the MDG public feed to members, after the prices have been determined and published by Market Supervision.

For more information on which messages are used for this dissemination please refer to the Optiq MDG Messages - Interface Specifications.

(iii) Strategy Trading on Derivatives markets

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service						●
Italian Markets	Mandatory	Change of service						●

The Strategy Trading functionality as currently available in the Optiq platform will be extended to the Italian Derivatives markets.

Enhancements will be made to the service, details in the sections below.

Impact for legacy Euronext Markets

The Strategy Trading functionality currently available in Optiq will remain the same.

In addition, exchange-generated calendar spreads (composed of two legs, one leg being Buy of the front expiry and the other leg being the Sell of back expiry , for all combinations of consecutive expiries) on Index Futures Contracts will be available as they are currently on legacy Euronext markets.

Impact for Italian Markets

The Strategy Trading functionalities in the Italian Derivatives markets and the Euronext Derivatives markets share a common set of features. For further information about the service

currently available on Euronext, please refer to the "How the Market Works" document. However, trading participants should be aware of the functional changes that will result from the deployment of the functionality for Italian Derivatives markets, which include:

- Optiq supports two implied matching models that can be configured at contract level:
  1. Event Driven Implied Matching (**EDIM**): the market participants have control of the generation of Implied prices; in other words, traders request Optiq to generate Implied prices. This model gives clients another means to request liquidity outside of the Central Order Book, when it is needed, and which they control
  2. Spontaneous Implied Matching (**SIM**): similar to the current IDEM facility, both strategy and component implied prices are calculated and available for matching on a permanent basis.
- Availability of a wider range of pre-configured strategy templates from which the user can choose, including delta-neutral[14] (this will replace the concept of *flexible combinations* currently in place for the Italian Derivatives markets);
- It will be possible to create strategies with up to 16 legs (currently on the Italian Derivatives markets, a maximum of 4 legs is allowed);
- GTC/GTD orders available on all strategies except delta neutral strategies;
- It will no longer be possible to build strategies whose legs do not have the same underlying.

Details on i) the use of EDIM and SIM models and ii) the availability of stock-contingent strategies for the Italian Derivatives markets will be provided in due course.

(iv) FIA Execution Source Code scheme (FIX Tag 1031)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Optional	New Service						●

The "Execution Source Code", often referred to as "Tag 1031", currently available for IDEM members in the SOLA trading system, will not be re-implemented in the Optiq Matching Engine on the migration date. This development will be assessed for re-introduction at a later stage.

Impact for legacy Euronext Markets

For Euronext legacy markets there will be no impact, since this information is not currently available in Optiq.

Impact for Italian Markets

The "Execution Source Code" field will be discontinued for Italian Derivatives markets after the migration.

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[14] Stock-Contingent Strategies for Italian Derivatives Market will be implemented in future releases of the platform (will remain available for Legacy Euronext Markets)

(v) Derivatives Market Making Model & Monitoring

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

Optiq includes a sophisticated Market Making model and Monitoring mechanism that will be extended to the Italian Derivatives markets in order to harmonise the Market Making framework across Euronext markets.

<div style="text-align:center">

Impact for legacy Euronext Markets
</div>

The current Market Making & Monitoring model will continue to be available **with no change** on the legacy Euronext markets.

<div style="text-align:center">

Impact for Italian Markets
</div>

The Italian Derivatives Market Making model will be harmonised with the Euronext MM framework, preserving local specificities in terms of size/spread/time/strikes/number of underlying obligations.

As a result, some of the existing roles (e.g. Specialist and Responding MM) will be decommissioned and the Market Maker Protection functionality available in Optiq will be extended to the Italian Derivatives markets. Moreover, real-time alerts currently disseminated to MMs in relation to the fulfilment of their MM obligations on Italian derivatives will be decommissioned.

Details on MM models and obligations for Italian Derivatives will be provided in due course.

(vi) Suspension due to Underlying

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

The mechanism for automatic suspension of related Derivative contracts when the Cash underlying is not trading will be extended to Italian Derivative Markets

<div style="text-align:center">

Impact for legacy Euronext Markets
</div>

The current mechanism will continue to be available **with no change** on legacy Euronext Derivative markets.

Impact for Italian Markets

Current Euronext model **will be extended** to the Italian Derivatives Markets.

As per the current process, whenever a Cash underlying is reserved due to volatility, the respective Derivative contracts, both "Central Order Book" and "Derivatives On Exchange Off Book" EMMs, will go into a 'Suspended due to Underlying' state, with the orderbook still open for the submission, modification and cancellation of orders.

Once the Cash underlying reopens, Market Surveillance will reopen the Derivatives contracts manually, once proper trading conditions have been established.

If the Cash underlying is in a *Suspended* or *Halted* state, the related Derivative contracts will also be *Suspended*, with the difference that the Wholesale EMM will also be *Suspended,* and the order entry will be altered to *Cancel Only*.

(vii) Lot multiplier

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service						●
Italian Markets	Mandatory	Change of service						●

Currently on Optiq, when Members would like to know the Contract Size of the Derivatives Contract they have traded they have to multiply the *Trading Unit* with the *Price* (Contract Size = Trading Unit * Price).

The Notional Value is then the Contract Size multiplied by the Quantity traded (Notional Value = Contract Size * Quantity).

Currently on Legacy markets, the Trading Unit is defined as an integer, while on the Borsa Italiana markets multipliers can have decimal values. Therefore, to accommodate the need to have multipliers with decimal values, Euronext will introduce the Lot Multiplier field that should be used going forward to compute the Contract Size, and other calculations where the Trading Unit is used.

Impact for legacy Euronext Markets

Clients connected to both the Legacy and Borsa Italiana markets are advised to use the field Lot Multiplier, as it will be populated for both Euronext Legacy and Borsa Italiana products.

Clients not trading on Borsa Italiana instruments may choose to keep using the Trading Unit temporarily, however are warmly suggested to move to the Lot Multiplier as the Trading Unit will likely be deprecated, Euronext will communicate the date in due course.

Impact for Italian Markets

Clients trading only on the Italian Derivatives Markets need to rely on the Lot Multiplier field for their computations, as the Trading Unit field **will not be populated** for Italian Markets.

(viii) Expiration Date

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service						●
Italian Markets	Mandatory	Change of service						●

Euronext will add a new field on Optiq, called *Expiration Date*, to be able to distinguish the last trading date from the expiration date.

Euronext will introduce the *Expiration Date* on Optiq as IDEM instruments can have an expiration date different from the Last Trading Date. Therefore a new field called Expiration Date will be added to the Referential files and will be disseminated via MDG.

Impact for legacy Euronext Markets

Although for Legacy products the Last trading date and the expiry date are equal for currently listed products, members will need to rely on both fields to get a complete picture of the contract settings, in particular if trading products listed on the Italian market.

Impact for Italian Markets

Currently on Borsa Italiana, the distinction is already made regarding the last trading date and the expiry date, so clients should continue to rely on both the *Expiration date* and the *Last Trading Date* fields to get a complete picture of contract settings.

(ix) Automated market reference (AMR)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service						●
Italian Markets	Optional	Change of service						●

In the context of the Borsa Italiana migration and the need to allow strike prices with four (4) decimals on all products, Euronext will adjust slightly the logic of the Automated Market Reference (AMR) field.

Impact for legacy Euronext Markets

On the legacy Derivatives Markets all instruments have a Derivatives Instrument Trading Code (formerly the AMR code) that allows clients to map against the Symbol Index and identify specifics like the Contract Code, Expiry, Exercise Price and other instrument details in one field for trading purposes. Due to the need to accommodate strike prices with four (4) decimals, Euronext has adjusted the AMR codification according to the following rules:

- The Expiry is truncated and only has the year and month;
- The expiry day is encoded in order to fit in 1 character;
- The Strike Price number of decimals is added by replacing the remaining character of the expiry day

Impact for Italian Markets

The AMR field is currently offered on the legacy Derivatives Markets as a legacy identifier, but will likely be deprecated in the future. It will be populated for the Italian instruments, however clients can choose to disregard it for decoding purposes as the information provided in the AMR is also available in individual fields. The Optiq identifier to be considered and used by members is the symbol index.

(x) Corporate Action Counter

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Legacy Euronext Markets	Mandatory	Change of service						●
Italian Markets	Mandatory	Change of service						●

In the context of the Borsa Italiana migration and the need to monitor the number of corporate action adjustments per instrument, a new field called *Corporate Action Counter* will be introduced.

Impact for legacy Euronext Markets

Currently on the legacy Derivatives Markets client do not have a specific flag to identify if the strike or expiry is subject to a Corporate Action, for this, the clients should rely on the Notice that is published by Euronext. With the *Corporate Action Counter* field that will be populated on a strike level, clients will be able to identify the number of Corporate Actions that have been applied to that specific strike. At the Go-Live of Phase 3 (25 March 2024) the Corporate Action Counter for all the legacy strikes will be set to 0 (zero).

Impact for Italian Markets

With the migration onto Optiq, Borsa Italiana instrument will no longer show a modified CA indicator at the end of the adjusted strikes. Clients trading on Italian instruments will need to use the Corporate Action Counter field to identify the number of Corporate Actions that have

been applied to that respective strike. At the Go Live of phase 3 (25 March 2024) for all strikes migrating from the SOLA platform onto Optiq, the Corporate Action Counter will represent the number of times that specific strike has been subject to a Corporate Action.

4.5. MARKET DATA

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

With the migration to Optiq, market data for the Italian Markets will be disseminated via the Optiq® Market Data Gateway (MDG), via multicast feed using SBE protocol.

The distribution of market data for Italian instruments will follow the same model already in place for the legacy Euronext markets.

In Optiq, market data is provided through different packs to which clients can subscribe; packs are produced for sets of instruments based on certain criteria such as the asset class.

Euronext offers common packs which are:

- Full market by order & BBO (**FBOU**);
- Full market by limit & BBO (**FBMU**);
- Best limits only (**BBBO**);
- Instrument characteristics, scheduled phases, market administration messages & MiFID II compliant trade messages (**REFT**).

Different delivery mechanisms are available for clients:

- 100Mb: the market data feed is compressed;
- 1Gb: the market data feed is shaped and, for some information/asset classes, compressed;
- 10Gb: the market data feed is unshaped;

The table below provides a draft (**still to be confirmed**) distribution of market data packs for the Italian markets:

	10 Gbps		1 Gbps			100 Mbps			
	FBOU	*FBMU*	*FBOU*	*FBMU*	*BBO1*	*FBOU*	*FBMU*	*BBO1*	*REFT*
Funds ETF Italy (ETFP)	●		●	●	●		●	●	●
Italian FXI (MOTX, XMOT)			●	●	●	●	●	●	●
EuroTLX Bonds Bond-X			●	●	●	●	●	●	●
Covered Warrants IT (SEDX)				●	●			●	●
ETLX Certificates Cert-X				●	●			●	●
EQUITIES Italy	●		●	●	●	●	●	●	●
ETLX Equities			●	●	●	●	●	●	●
TAH			●	●	●	●	●	●	●
GEM			●	●	●	●	●	●	●
Equity Derivatives IT				●	●			●	●
Index Options IT		●		●	●			●	●
Index Futures IT		●		●	●			●	●

Note: FTSE Indices values and updates will not be disseminated by Optiq® MDG.

Impact for legacy Euronext Markets

The current market data model as described above will continue to be offered to clients **with no change** on the legacy Euronext markets.

Impact for Italian markets

The Optiq® MDG features currently in place for the legacy Euronext markets **will be extended** to Italian markets. Note that some specific features will be implemented for the Italian markets, in particular:

- A TCP/IP compressed feed will be developed to avoid impact on small participants, enabling clients with limited bandwidth capacity to receive market data;

- A snapshot service will be developed to ensure continuity of service to clients that use the current snapshot service and avoid impacts on client behaviours.

4.6. MYEURONEXT – THE NEW EURONEXT PORTAL

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	New Service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

MyEuronext, the new Euronext client portal, will be available for all Euronext clients to manage their Membership as well as the following features:

- Manage company data and contact details;
- Manage trading profile and related trading identifiers;
- Manage instruments as market maker or liquidity providers;
- Configure technical access to trading systems (Logical Access);
- etc.

Impact for legacy Euronext Markets

A wide range of Market Access and Membership activities **will be fully managed in MyEuronext**, the new Euronext portal.

Impact for Italian Markets

The new MyEuronext portal will replace the portal currently in use for Borsa Italiana's services. Most of the features available in the current Italian Member Portal will be migrated into the MyEuronext portal. Note that the decommissioning of the current Italian Member Portal will be done in different steps, which may not necessarily be completed by the end of the migration of the Italian markets to Optiq.

The time schedule for the delivery of the MyEuronext portal will be provided in due course.

4.7. REGULATORY REPORTING

4.7.1. Transaction Reporting

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

The current Transaction Reporting features in place for legacy Euronext markets will be extended to all Italian markets.

Impact for legacy Euronext Markets

The only relevant change for the legacy Euronext Markets is related to the change of format of the TVTIC (described above). This change will be made as part of the rationalisation of the number of trade identifiers.

Clients using the service should be aware of the change and must use the TVTIC that will be provided by Euronext.

Impact for Italian Markets

Transaction Reporting for non-MiFID firms on Optiq markets is executed via the **Saturn** application. This model will be implemented for the Italian markets.

For more details, please refer to the official Saturn documentation.

The plan for the transition from the current Transaction Reporting mechanism in place for the Italian markets to the Euronext Saturn application will be provided in due course.

4.7.2. Order Record-Keeping and Short/Long Code Management

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Order Record-Keeping (including short/long code management) on the Optiq markets is executed via **Saturn** application.

Impact for legacy Euronext Markets

The current Order Record-Keeping functionality will continue to be available with no change on the legacy Euronext markets. The TVTIC will be adjusted to the new format.

Impact for Italian Markets

The Euronext market model for Order Record-Keeping will be implemented for the Italian markets.

For details, please refer to the official Saturn documentation.

4.7.3. Files and Reports

(i) Order to Trade Ratio (OTR) Reports

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

OTR reports are generated for both legacy Euronext markets and Italian markets.

With the migration of Borsa Italiana markets to Optiq, the **current OTR reports will be amended to integrate some of the features currently available on the Italian markets**.

Impact for legacy Euronext Markets

In addition to the existing OTR reporting, **new reports will be made available** for market participants. The OTR reports will be enhanced to cover all asset classes and with a fine-tuned calculation.

Impact for Italian Markets

Currently, at Borsa Italiana, OTR reports are provided with daily and monthly reports related to OTR ratios and OTR breaches.

After the migration to Optiq, periodic reports related to the OTR breaches will be made available for all market participants. The data structure and frequency of the reports, as well as the technical process to access them, may change following the migration.

Further information will be provided in due course.

(ii) Market Making Performance Reports

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Market Making Performance Reports are provided on both legacy Euronext markets and Italian markets.

The current Market Making Performance Reports will be amended to integrate some of the features currently available on Italian markets.

Impact for legacy Euronext Markets

Currently on the legacy Euronext markets, MM reports are sent only to members that have signed a Market Maker agreement or to members that have signed a LP agreement. In the latter case, RTS8 metrics are included in the LP reports, i.e. daily reports received by members that have signed a LP agreement.

A dedicated Market Maker report will be implemented and sent daily to all market participants that have signed a MM/LP agreement. The format of these reports will change. The technical process to access the reports may also change following the migration.

Impact for Italian Markets

Currently, on Italian markets, MMs and LPs are provided with daily and monthly reports related to the fulfilment of their obligations.

After the migration to Optiq, periodic reports related to the fulfilment of MM obligations will be made available for all MMs and LPs. These reports will be unique per business day. The data structure and frequency of the reports, as well as the technical process to access them, may change following the migration.

Further information will be provided in due course.

(iii) Standing Data

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No Change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Standing Data files (Instrument Reference Data, etc.) will be provided by a new Euronext Common File Transfer System (CFTS) and in the existing Euronext format.

Impact for legacy Euronext Markets

The format of the Standing Data files will remain unchanged. Euronext is rationalising its file transfer solutions to improve client experience. A new server will be implemented for file transfers, leveraging MyEuronext for the web interface. Clients will be required to migrate to the new solution. A parallel-run strategy is being considered to facilitate the transition.

Impact for Italian Markets

Clients of the Italian markets should implement the reception and parsing of the Standing Data files according to the details provided in the Optiq documentation.

(iv) Reconciliation / End of Day Files

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●	●	●
Italian Markets	Mandatory	Change of service	●	●		●	●	●

End of Day Files are the solutions offered by Optiq for end-of-day reconciliations. They will replace the existing Recap/Reconciliation files currently provided for Italian markets. They will be provided by Euronext Common File Transfer System (CFTS) and in the Euronext's existing format.

Impact for legacy Euronext Markets

The format of the End of Day files **will remain unchanged**. They will be made available via a new platform changing the distribution file model. **A new server will be implemented for file transfers**, leveraging MyEuronext for the web interface. Clients will have to migrate to the new solution. A parallel-run strategy is being considered to facilitate the transition.

Impact for Italian Markets

Clients of the Italian markets should implement the reception and parsing of the End of Day files according to the details provided in the Optiq documentation.

4.8. COLLARS & SURROUNDINGS

4.8.1. Collars

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●		●		●
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

The model for Price Collars in place for the **legacy Euronext markets will be extended to the Italian markets, with some modifications**.

Impact for legacy Euronext Markets

Cash

Order prices validation at order entry against the Static Reference Price or Dynamic Reference Price may be implemented on Optiq (X parameter) for legacy Euronext markets (out of W&C). If the price is outside the allowed price band, the order will be rejected.

Clients will have to be aware that orders with limit price outside thresholds will be rejected and should take the necessary actions to manage this. In addition, clients should note that good till

date orders might be cancelled if the price goes outside the new parameters.

Derivatives

The current model will be **slightly adjusted** on legacy Euronext Derivatives markets with two new trading safeguard functionalities to be developed on Optiq for Futures, and some changes to the current FSP and TPV functionalities.

Trade Price Validation (TPV) will be slightly modified, to remove the automatic adjustment of the Dynamic Collar Reference Price (DCRP) to the Indicative Matching Price (IMP) after the first iteration for futures with Future Market Price (FMP) pricing style. In addition, currently the counter of attempts to reopen is reset every time TPV is triggered from continuous phase. This will be enhanced to only reset if the potential trade price is different from the one attempted in a previous reservation (if there was one).

The Future Spike Protection (FSP) mechanism will be modified with regards to the calculation of the FSP reference price, and it can only be triggered upon a potential trade outside boundaries on the blue month, as opposed to every maturity which is in place today.

A new mechanism called Future Limit Interruption Protection (FLIP) will be introduced on select Future contracts, and will be mutually exclusive with FSP. This protection will act as a trade validation parameter, in conjunction with the existing dynamic collars, and will trigger a reservation once breached.

In addition, the possibility to have static collars will be introduced, similar to what is present on Cash markets today.

For full details on the Optiq FSP, FLIP and Static collars trading functionalities, please refer to the "Euronext Derivatives: How The Market Works" document.

Impact for Italian Markets

The Circuit Breaker phase will be replaced by volatility interruptions on both the Cash and Derivatives markets. For securitised derivatives traded on the RFE model, please also refer to the description of the new order entry limits (X parameter).

Cash

Main changes:

- Intraday changes to the static and dynamic prices will be disseminated via market data;
- Breach of the collars will cause a volatility reservation (the former concept of circuit breaker is no longer in use);
- Length of volatility reservation is not fixed.

Warrants & Certificates (SeDeX and Cert-X)

Price bands percentage thresholds are applied to the previous day's Closing Price during the call phase. After continuous trading opens, they are applied to the latest Valuation Price (currently, orders are checked upon entry to make sure they do not fall outside the price bands (% - X% parameter) applied to the control price, which is equal to the previous day's reference price in the quoting period, and afterwards equal to the static price).

Circuit breaker mechanisms, which cause a short trading suspension when the price of a potential trade exceeds a certain threshold, have been removed due to the features of the RFE market model.

Derivatives

On the Italian Derivatives market, the price collars mechanism consists of an order entry limit (X parameter) and trade execution limits based on static and dynamic prices (Y and Z parameters). Price collar limits are defined in the 'Guide to the Trading Parameters'. The percentage limits and the reference prices can be changed during the trading day according to market conditions.

After the migration to Optiq, **all orders and quotes will be checked upon entry and upon execution against the maximum limits** (Dynamic Collars). **Collars will apply around a reference price updated dynamically throughout the trading day** (Dynamic Collar Reference Price, or DCRP).

Depending on the product type and on market conditions, Borsa Italiana will adopt different methodologies to determine the DCRP. Moreover, the Optiq platform uses the concept of Market Quality Spread (MQS) to determine dynamic collars, which are tightly coupled with Market Maker obligations. The DCRP and the multipliers to determine the Collars may be modified by the Exchange during the day depending on market conditions.

In the case of an attempt to trade outside the Dynamic Collars, the instrument(s) will be moved into a reservation phase. The minimum duration of intraday reservations may change depending on the instrument type and on market conditions. The intraday reservation phases can be reiterated multiple times and might result in automatic cancellation of orders outside the Collars (Trade Price Validation mechanism, or TPV).

Under some circumstances, such as the volatility interruption of the underlying shares, trading on derivatives can be temporarily halted with contracts being moved into a suspended state.

An additional protection for futures will be represented by the Future Spike Protection (FSP), Future Limit Interruption Protection (FLIP) and Static Collars functionalities. Any attempt to breach either the Dynamic Collars, the FLIP boundaries or Static Collars for those contracts on which they are available, will result in an intraday reservation on the affected instrument(s).

The numerical values of the Collars may change respect to the current values.

Other changes:

- Intraday changes to the multipliers used to determine price collars will be disseminated at Contract level;
- Breach of the Collars will cause a volatility reservation (the former concept of circuit breaker is no longer in use);
- The length of the volatility reservation is not fixed.

4.8.2. Stressed Market Conditions (SMC) & Exceptional Market Circumstances (EMC)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of behaviour	●	●				
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

The model for Stressed Market Conditions (SMC) in place for the legacy Euronext markets will be extended to the Italian markets.

In the case of Stressed or Exceptional Market Conditions declared by Euronext for an Optiq segment, a public *MarketStatusChange* message is sent via Market Data at instrument level (Cash markets) or for each contract (Derivatives) in that Optiq segment to notify clients (and at the end of the Stressed or Exceptional Market Conditions, a public *MarketStatusChange* message is also sent via Market Data at instrument level (Cash) or for each contract (Derivatives) in that Optiq segment to notify clients).

Euronext is considering implementing shorter SMC durations depending on market conditions: SMC period per default value will be equal to 15 minutes, but Market Surveillance can trigger a manual SMC period with no end period under exceptional circumstances. However, please note that this will have no impact on the way the SMC start period and the SMC end period are communicated via MDG.

Impact for legacy Euronext Markets

The current mechanism as described above will continue to be available **with no change** on legacy Euronext Cash & Derivatives markets.

Impact for Italian Markets

Current Euronext model **will be extended** to the Italian Cash & Derivatives Markets.

As per the current process, SMC and EMC circumstances will be communicated to the market or described in the Market Rules. Specific conditions during which the activation of SMC and EMC is declared and the relaxed market making obligations during SMC will be defined in the Market Rules.

4.9. DISSEMINATION OF OPEN INTEREST

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Optional	Change of service						●
Italian Markets	Optional	Change of service						●

Impact for legacy Euronext Markets

There is **no change** in the process for the dissemination of Open Interest in scope for the legacy Euronext markets, however the timing of the dissemination is still under evaluation and may be later than the current time of 22:30.

Impact for Italian Markets

The Open Interest (OI) management of the Italian Derivatives markets will be **harmonised with the functioning on other Euronext Derivatives markets**.

Open Interest will be published once a day for each series of Italian Derivatives contracts traded. It is published immediately after the end of the trading session (i.e. immediately after 22:30 CET) via a standing data file (on the Italian markets, it is currently disseminated by native market data feed).

4.10.   CORPORATE ACTIONS

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service						●
Italian Markets	Mandatory	Change of service						●

The Corporate Actions model currently implemented on Optiq will be extended to the Italian markets, with some modifications.

Impact for legacy Euronext Markets

The current model will be **slightly adjusted** on legacy Euronext Derivatives markets.

Euronext will align to the legacy Italian Derivatives markets model by adding a new field in the Reference Instrument market data feed and standing data file. This new field, "*Corporate Action Counter*", will be used to monitor specifically corporate actions adjustments. It will be a numeric field added to each tradable instrument and will represent how often the series has been subjected to a corporate event (such as 0, 1, 2, 3, etc.) during its lifetime.

This new data will be applicable to all Euronext derivatives instruments and its use will be optional on legacy Euronext Derivatives markets.

Impact for Italian Markets

The legacy Euronext Derivatives markets model **will be extended** to the Italian Derivatives markets. In particular, among other changes, the Italian Derivatives market will not change the ISIN codes for adjusted series following a corporate action. Thus ISIN codes "before" and "after" a corporate action will be the same.

Trading participants and clearing members are invited to analyse the impact on their side.

Although the current model will be extended to the Italian Derivatives markets, not all functionalities will be present initially as currently on the legacy Euronext Derivatives markets:

1) In case the Corporate Actions policy would suggest putting a package of both stock and cash in place, this will not be done for the Italian Markets due to technical constraints.
2) In case a Ratio corporate action would result in a lot size that is a multiple of the standard lot size (e.g. 200 with standard lot size 100), then the position would be multiplied (by 2 in this example) and the lot size would remain the same on the legacy markets. For the Italian Markets the lot size will be multiplied and the position will remain the same.

4.11.   POST TRADE

4.11.1. General Post-Trade set-up

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

Impact for legacy Euronext Markets

The Post-Trade set-up for the legacy Euronext Markets **will not be impacted** by the migration of the Italian markets to Optiq.

Clients are invited to follow the Euronext communications on the Group Post-Trade strategy (in relation to the clearing internalisation programme) that Euronext will send in due course.

Impact for Italian Markets

Cash Markets

For the Italian Cash markets, the Comp ID (trading session) is currently sent to post-trade (clearing & settlement) systems. After the migration to Optiq, **the Firm ID** (which represents the *Member Code*) **will be sent to post-trade** (clearing & settlement) **systems**.

Clients are invited to use the TVTIC (TUI) for their front-to-back reconciliations and to perform non-regression testing for this purpose (see below "Customer Front-to-Back Reconciliation process between trading participants, clearing members and settlement agents").

Derivatives Markets

Optiq enables trading participants to populate specific clearing-related data in an Order Entry Clearing Aggregate, which specifies, amongst other data, the clearing account name, the destination member code that is the beneficiary owner of a Give-Up, the Open / Close indicator, Free text, etc.

Once provided to Optiq at order level, and after trade execution, these data are disseminated to the CCP to support trade allocation in clearing accounts and give-up processing when required.

Like for Cash Markets, Derivatives trading clients are invited to use the TVTIC (TUI) for their front-to-back reconciliations and to perform non-regression testing for this purpose (see below "Customer Front-to-Back Reconciliation process between trading participants and clearing members").

4.11.2. Trader ID

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

After the migration from the current derivatives trading platform to Optiq, **the current SOLA process** (based on the **Trader ID**, which for Italian Derivatives markets is sent to the CCP and currently can be used to trigger trade allocation rule in the CCP clearing system) **will change and will rely on a process based on the combination of Optiq data "Account Number" and Clearing Instruction" set to Automatic Posting.** These fields are already available in the Optiq Order Entry Clearing Aggregate and Trading clients should populate existing Trader ID value when required in the "Account Number" combined with "Clearing instruction" set to Auto Posting so that the existing trade allocation rule continues to be applied in the right clearing account without any impact in the clearing system.

EDSP prices will continue to be calculated as per the current rules. In addition, the prices will be made available via Market Data.

Additionally, on the Derivatives markets after the migration to Optiq, **the Firm ID will be sent to the CCP (clearing system), while currently the "*SOLA member Code*" is sent to the CCP**.

4.11.3. Give Up process

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

Currently on SOLA, Trading Members populate the **"SubAccount" - "Client Code data" (BCS)** (free text agreed with the General Clearing Member of the Trading Member) as a **"Clearing Instruction"** to trigger Give Ups in the clearing system. With the migration onto Optiq, Trading Members should populate the **"SubAccount" - "Client Code data" (BCS)** in the **Optiq "Long Client ID" so that the existing Give Up / Give In rules continue to be applied without any impact in the clearing system**.

The above process is specific to BITA markets and does not apply on the Euronext legacy markets for the management of give ups on which give up process is based on the combination of destination member code (beneficiary owner of a Give-Up) and "Clearing Instruction" set to Automatic Give Up.

4.12.   TECHNICAL CHANGES

This section focuses on some technical features and changes that will be made on the Optiq platform.

4.12.1. Recovery after failure

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	New Service	●	●	●	●	●	●

In the case of failure of a single market component or the whole primary partition (not Disaster Recovery), **the system will failover to the back-up trading chain**. Synchronisation messages are sent to clients to secure full alignment of recorded orders and trades. Failover on equities markets may be done without a market halt.

Orders entered with the flag "Cancel on disconnection" will be cancelled, quotes are automatically cancelled and instruments are automatically suspended as per the expected behaviour.

Live orders and trades must be reconciled by the participants once the synchronisation messages are sent. In Optiq, the replication to the back-up trading chain is asynchronous; gaps are constantly monitored with trade recovery mechanisms in place if required.

4.12.2. Disaster Recovery Site

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	New Service	●	●	●	●	●	●

The disaster recovery (DR) model currently used by the legacy Euronext markets will be extended to the Italian markets.

In a DR scenario, as per the current model:

- customers will rely on virtual rather than physical hardware;
- components of the Optiq architecture will not have a local back-up.

Clients are reminded that the model described above ensures an acceptable level of service in compliance with MiFID provisions (Art 48 and RTS 7 Articles 15-17).

On Optiq, orders are replicated to the disaster recovery site. In case of a switch to the back up site, order books will not be purged.

4.12.3. Enhanced Front-to-Back reconciliation process

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	New Service	●	●	●	●	●	●

Customer Front-to-Back reconciliation will be strengthened thanks to the implementation of the new format of the TVTIC / Trade Unique Identifier throughout the whole value chain, from the trading system to post-trade systems, with the same logic on **all** Euronext markets.

The Trade Unique Identifier (TUI) provided by Optiq will be **unique per business day** irrespective of the instrument and across all market locations / trading venues of the Euronext group. In addition, we plan to make the TUI unique over many days.

The Trade Unique Identifier will be reported in any trade execution confirmed to trading participants, as well as disseminated to post-trade infrastructures.

For legacy Euronext markets, CCPs will also report the Trade Unique Identifier to their clearing members.

This Trade Unique Identifier will play a key role between trading participants and clearing members in the day-to-day trade reconciliation process, helping them track exhaustively the trades executed and reported for clearing based on one unique trade reference.

CCPs of the legacy Euronext markets and Italian markets have confirmed that the verification in the processing of this Trade Unique Identifier will have a limited impact on clearing members.

4.12.4. Optiq partitions

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	No change							
Italian Markets	N/A							

There will be no change in the number of Euronext partitions.

4.13.   PHYSICAL CONNECTIVITY

After the migration of Borsa Italiana markets to Optiq, all markets will be operated from the Aruba IT-3 Data Centre (Bergamo, Italy), the new primary Data Centre for the Euronext Group (go-live for legacy Euronext markets is targeted for **June 2022**).

Customers that are currently using the Borsa Italiana colocation facility should set up their **new colocation footprint in the new Euronext colocation halls**.

Bidirectional connectivity between the Euronext colocation and current Borsa Italiana colocation will be provided until the completion of the migration of Italian markets to Optiq.

Access to the new Data Centre will be made available via Euronext and Borsa Italiana connectivity options:

- Client Managed Connectivity (CMC) or Euronext Managed Connectivity (EMC) - directly to Aruba (Euronext Primary DC) and/or St Denis (Euronext DR Site), and/or from the London PoPs;
- Aruba colocation;
- Borsa Italiana CMC (until the end of the migration) and Bit Network (until day one of Borsa Italiana Migration phase 1);
- Borsa Italiana colocation (until the end of the migration);
  Via Service Providers connected to Euronext markets.

4.14.   SESSION TIMETABLES

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives
Legacy Euronext Markets	Mandatory	Change of service	●	●	●	●		●
Italian Markets	Mandatory	Change of service	●	●	●	●		●

Before Phase 1 of the migration, the Call Phase started at the following times:

	Legacy Euronext Markets (previous start time)	Italian Markets (previous start time)
Equities	07:15	08:00
ETPs	07:15	08:45
Fixed Income	07:15	08:00
Warrants & Certificates	07:15	09:05
Index Derivatives	07:15	07:45 (FIB, MINI, MICRO only) 08:30 (MCAP only)
Equity Derivatives	07:15	n/a

Together with the migration of Italian Markets, it has been decided to harmonise the start of Call Phase. As a result, since Phase 1 Go-Live, the start of the Call Phase for all legacy Euronext Cash markets (Equities, ETPs, W&Cs and Fixed Income markets) as well as for Italian Equities and ETPs markets, has been pushed to 07:30 CET.

As of the Phase 2 Go-Live, the Call Phase on Italian Fixed Income and Warrants & Certificates markets will start at 07:30 as well.

As of the Phase 3 Go-Live, the Call Phase on will start at the following times:

	Legacy Euronext Markets	Italian Markets
Equities	07:30	07:30
ETPs	07:30	07:30
Fixed Income	07:30	07:30
Warrants & Certificates	07:30	07:30
Index Derivatives	07:30	07:30
Equity Derivatives	07:30	07:30

For Italian Markets, please refer to the timetables below, which describe the trading patterns implemented in Optiq® for the Borsa Italiana markets that were migrated during Phase 1 and will be migrated during Phase 2 and Phase 3.

The trading patterns detailed below refer to standard trading hours for on-book services. Off-book on-exchange services for the reporting of pre-arranged transactions will follow the TCS schedule. Please refer to the TCS trading manual for TCS trading hours.

For Derivative Markets, the start time for continuous trading for the Wholesale facility is currently at 7:15 and is aligned with the start of call phase for on-book services. This alignment will continue to exist, and the start of continuous phase for the Wholesale facility will therefore change and move to 7:30 for all products.

Trading patterns for non-standard configurations (where available, such as single-uncrossing patterns, IPOs and takeover bids, unexercised rights) will be communicated in due course.

5. TRADING HOURS AND CALENDAR

5.1. TRADING HOURS

5.1.1. Italian markets

5.1.2. Cash On book

As Borsa Italiana Cash markets migrate to the Optiq® platform, they will use the below patterns as of the migration Go-Live date of the relevant market.

Equities:

The below timetables relate to the Trading Groups indicated for each of the segments.

Trading cycle pattern for Euronext Milan (Trading Groups 31, 3B, 3C, 3E, 3F), Euronext Growth Milan (Trading Group 3P), BIT GEM (Trading Group 3X), Euronext MIV Milan (Trading Groups 5A, 5B)

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Opening	07:30	09:00 (1)
Uncrossing	Random uncrossing	Opening	09:00 (1)	09:00 (1)
Continuous	Random uncrossing	Standard	09:00 (1)	17:30
Call	No qualifier	Closing	17:30	17:35 (1)
Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Continuous	Trading at Last and Random uncrossing	Closing	17:35 (1)	17:40
Closed	No qualifier	Closing	17:40	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading cycle pattern for Euronext MIV Milan (Trading Groups 5D, 5E, 5F, 5G)

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Opening	07:30	09:00 (1)
Uncrossing	Random uncrossing	Opening	09:00 (1)	09:00 (1)
Continuous	Random uncrossing	Standard	09:00 (1)	17:30
Call	No qualifier	Closing	17:30	17:35 (1)
Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Closed	No qualifier	Closing	17:35	17:35
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading cycle pattern for Euronext Milan (Trading Group 3D), Euronext Growth Milan (Trading Group 3Q), Euronext MIV Milan (Trading Group 5C)

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Closing	07:30	09:00 (1)
Uncrossing	Random uncrossing	Closing	09:00 (1)	09:00 (1)
Closed	No qualifier	Closing	09:00	09:05
Closed (2)	No qualifier	Closing	09:05	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading cycle pattern for Euronext Milan (Trading Groups 3G, 3H), Euronext Growth Milan (Trading Group 3R), Euronext MIV Milan (Trading Groups 5H, 5I)

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Closing	06:30	07:30
Call	No qualifier	Closing	07:30	17:35 (1)
Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Closed	No qualifier	Closing	17:35	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading After Hours:

Trading cycle pattern for Euronext TAH Milan

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	18:00
Uncrossing	No qualifier	Closing	18:00 (1)	18:00 (1)
Continuous	Random uncrossing	Standard	18:00 (1)	20:30 (1)
Closed	No qualifier	Closing	20:30	20:59
Closed (2)	No qualifier	Closing	20:59	21:15
Inaccessible	Inaccessible	Closing	21:15	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

ETFs:

Trading cycle pattern for ETFPlus

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Opening	07:30	09:04 (1)
Uncrossing	Random uncrossing	Opening	09:04 (1)	09:04 (1)
Continuous	Random uncrossing	Standard	09:04 (1)	17:30
Call	No qualifier	Closing	17:30	17:35 (1)

Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Continuous	Trading at Last and Random uncrossing	Closing	17:35 (1)	17:40
Closed	No qualifier	Closing	17:40	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Warrants & Certificates:

Trading cycle patterns for SeDeX:

After the migration to Optiq, issuers on SeDeX will have the ability, at ISIN level, to choose for each of their products between:

- Two opening times (08:00 or 09:05 CET);
- Three closing times (17:30 or 20:30 or 22:00 CET).

This is reflected in the below timetables.

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Closing	07:30	08:00 or 09:05 (1)
Uncrossing	Random uncrossing	Closing	08:00 or 09:05 (1)	08:00 or 09:05 (1)
Continuous	Random uncrossing	Standard	08:00 or 09:05 (1)	17:30
Closed	No qualifier	Closing	17:30	17:45
Closed (2)	No qualifier	Closing	17:45	22:15
Inaccessible	Inaccessible	Closing	22:15	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Closing	07:30	08:00 or 09:05 (1)
Uncrossing	Random uncrossing	Closing	08:00 or 09:05 (1)	08:00 or 09:05 (1)
Continuous	Random uncrossing	Standard	08:00 or 09:05 (1)	17:30
Continuous	Random uncrossing	Standard	17:30	20:30
Closed	No qualifier	Closing	20:30	20:45
Closed (2)	No qualifier	Closing	20:45	22:15
Inaccessible	Inaccessible	Closing	22:15	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Closing	07:30	08:00 or 09:05 (1)

Uncrossing	Random uncrossing	Closing	08:00 or 09:05 (1)	08:00 or 09:05 (1)
Continuous	Random uncrossing	Standard	08:00 or 09:05 (1)	17:30
Continuous	Random uncrossing	Standard	17:30	20:30
Continuous	Random uncrossing	Standard	20:30	22:00
Closed	No qualifier	Closing	22:00	22:05
Closed (2)	No qualifier	Closing	22:05	22:15
Inaccessible	Inaccessible	Closing	22:15	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Fixed Income:

Trading cycle pattern for MOT and ExtraMOT

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Opening	07:30	09:00 (1)
Uncrossing	Random uncrossing	Opening	09:00 (1)	09:00 (1)
Continuous	Random uncrossing	Standard	09:00 (1)	17:30
Call	No qualifier	Closing	17:30	17:35 (1)
Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Continuous	Trading at Last and Random uncrossing	Closing	17:35 (1)	17:40
Closed	No qualifier	Closing	17:40	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

EuroTLX:

Trading cycle pattern for Bond-X, Cert-X and EuroTLX Equities

Phase	Phase qualifier	Trading period	From	To
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Closing	07:30	09:00 (1)
Uncrossing	Random uncrossing	Closing	09:00 (1)	09:00 (1)
Continuous	Random uncrossing	Standard	09:00 (1)	17:30
Continuous	Trading at Last and Random uncrossing	Closing	17:30 (1)	17:40
Closed	No qualifier	Closing	17:40	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.
(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

5.1.3. Session timetables – TCS Off book services

The opening and closing time of TCS are different from the Euronext Optiq system. The TCS system is open every business day, following the Euronext trading calendar.

For each trading group, two types of status are available on TCS, depending on the Euronext Optiq system status:

In Session:

The In-session phase runs from the pre-opening (07:30 CET) until the last 'closed' phase of the related trading group ("Book State" = 2 (Closed) and "Trading Period" = 3 (Closing)).

Out of session:

The Out-of-session phase runs from the last 'closed' phase of the day (see definition above) until the inaccessible phase of Optiq. Opening, closing and auction times depend on trading groups. Parameters per trading group are as set out in the Appendix to the Trading Manual. TCS trades cannot be accepted after a cut-off time set at 18:35 CET and, depending on the type of instrument and operation, additional restrictions may apply on the trading hours.

5.1.4. Derivatives On and Off Book

Table below describes proposed new trading hours for Italian derivatives products.

Trading phase	Time interval (CET time)	Euronext Derivatives Milan (equity-based products)					
		FIB, MINI and MICRO	MCAP	FDIV, MIBO, SDF	SF (ITA names)	SF (EU names)	SO
Call phase[1]	7.30 - 8.00 (8.00.00 - 8.00.30)	✓	-	-	-	-	-
	7.30 - 9.01 (9.01.00 - 9.01.30)	-	✓	✓	✓	✓	✓
Continuous Trading	8.00 - 22.00 (daily session: 8.00 - 17.30) (evening session: 17.30 - 22.00)	✓	-	-	-	-	-
	9.01 - 17.30	-	✓	✓	✓	✓	✓
Large-in-Scale Trade Facility (during normal trading days)	7.30 - 22.00	✓	-	-	-	-	-
	7.30 - 18.30	-	✓	✓	✓	✓	✓
Large-in-Scale Trade Facility (on expiry day)	7.30 - 9.05	✓	✓	✓	✓	-	-
	7.30 - 17.30	-	-	-	-	✓	-
	not available	-	-	-	-	-	✓

[1] The end of the (opening) call phase refers to a randomly selected second between 8:00:00 - 8:00:30 (FIB, MINI and MICRO) or 9:01:00 - 9:01:30 (all other products)

5.2. TRADING CALENDAR

The Borsa Italiana trading calendar will be maintained.

For further information please contact **Optiqmigration@euronext.com** or your Sales representative.

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