GUIDE TO THE EURONEXT TRADING SYSTEM

Borsa Italiana Migration to Optiq®: overview of functional changes

March 2022
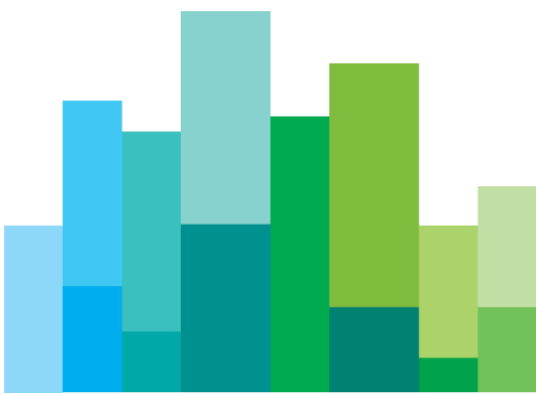
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1. INTRODUCTION

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.

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

- **Q1 2023** – Cash products: **Equities** (including MIV market) and **ETFs**

- **Q2 2023** – Cash products: **Warrants & Certificates**, **Fixed Income** and **other Cash markets** (including EuroTLX)

- **End Q2 2023** – Derivatives products: **Equity and Index Derivatives**, **Energy Commodities**

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.

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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 versions of the documents indicated below:

Optiq Connectivity:

- Euronext Markets – Optiq® OEG Connectivity Specifications V3.0 – Aruba Data Centre
- Euronext Optiq® Market Data Gateway – Production Environment V3.0 – Aruba Data Centre
- Euronext Optiq® Market Data Gateway – External User Acceptance Environment V3.0 – Aruba Data Centre

Optiq Kinematics:

- Euronext Cash Markets – Optiq® Kinematics Specifications – V4.13.0
- Euronext Derivatives Markets – Optiq® Kinematics Specifications – V4.12.0

Optiq OEG & MDG client specifications:

- Euronext Markets – Optiq® OEG Client Specifications – SBE Interface – V4.13.0
- Euronext Markets – Optiq® OEG Client Specifications – FIX 5.0 Interface – V4.13.0
- Euronext Markets – Optiq® MDG Client Specifications – V4.12.0 Introduction To Optiq® Trading System
- Euronext Derivatives How The Market Works – V5.0.0

Saturn:

- Euronext Global Reporting Solution – Saturn Interface User Guide V2.7
- Euronext Saturn Web Services Specifications V2.9.15
- Euronext Short Long Code Management Application V2.4
- Euronext Off-Book On-Exchange Trades Publication – Market Model Overview – Version 1.4
- Euronext APA/ARM Services – Functional Overview Version 3.0
- Euronext Saturn MiFID II Commodities Positions Reporting V1.13
- TCS Web Access – User Guide – V4.2

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	Markets and products within Euronext Cash markets are divided into trading groups based on different trading procedures. The composition of these groups 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).
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

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| 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) | 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.

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)
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

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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.

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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

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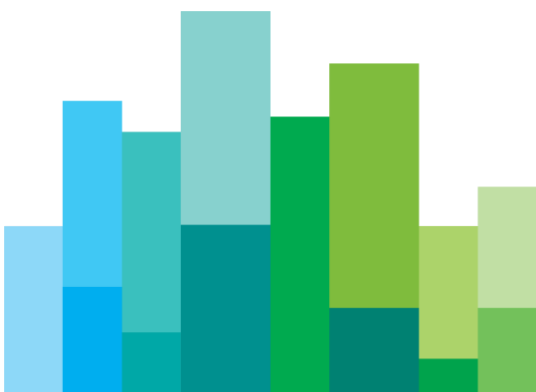
The proprietary Euronext trading system, Optiq®, will become the unique trading platform for accessing all Euronext Cash and Derivatives markets.

2.1 SCOPE OF THE MARKET MIGRATION

With the exception of AGREX, all Borsa Italiana markets will be migrated onto Optiq, leading to a harmonisation of the trading systems and a decommissioning of Millennium Exchange and SOLA technologies.

Cash/Derivatives	Italian Markets	Migration to Optiq®?	Market / Assets
Cash	Euronext Milan	✔	**Cash Equities**
	Euronext Growth Milan (EGM)	✔	
	Bit GEM	✔	
	TAH	✔	
	Equities (**EuroTLX**)	✔	
	ETF Plus	✔	**ETFs & Funds**
	Euronext MIV Milan	✔	
	ATFund	Under discussion	
	SeDeX	✔	**Structured Products** (Warrants & Certificates)
	Cert-X (**EuroTLX**)	✔	
	Bond-X (**EuroTLX**)	✔	**Fixed Income**
	MOT	✔	
	ExtraMOT	✔	
Derivatives	IDEM	✔	**Equity, Index & Commodity Derivatives**
	IDEX	✔	
	AGREX	✖	

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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	Products & Services	Markets	Current platform	Target platform
Cash	Cash Equities	Euronext Milan (MTA), Bit GEM, EGM, TAH, ETLX Equities	Millennium	Optiq
	ETFs & funds	ETF Plus, MIV	Millennium	
	Warrants & Certificates	SEDEX, ETLX (Cert-X)	Millennium	
	Fixed Income	MOT, ExtraMOT, ETLX (Bond-X)	Millennium	
Der	Equities & Index derivatives	IDEM	Sola	
	Power derivatives	IDEX	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

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>:

- 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;

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- **The post-trade (clearing and settlement) set-up and rules will remain** unchanged for Borsa Italiana's customers. Optiq will be connected to Euronext Securities Milan (formerly Monte Titoli) and Euronext Clearing (formerly CC&G). Some technical adjustments may be required to ensure operational continuity. More information will be provided in due course;

- 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

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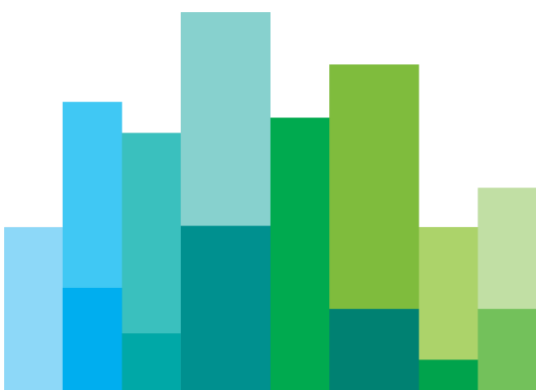
This section provides a high-level overview of the Optiq® platform, focusing on access to the Euronext markets through "Logical Accesses" (trading sessions) and Member Configuration.

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:
  - FIX 5.0 SP2
  - SBE (Simple Binary Encoding)
- A Matching Engine (ME)
- A Market Data Gateway (MDG)
  - Market Data provided via multicast feed in SBE format
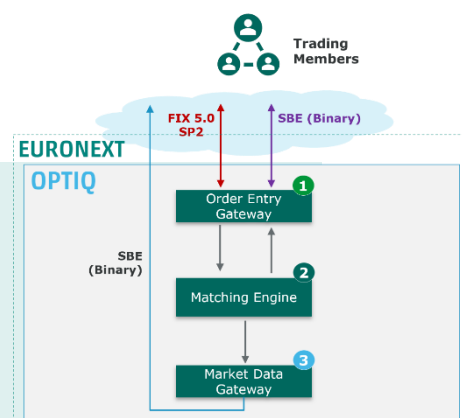
Optiq is designed to provide a logical segregation per type of asset class:

- 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 a given 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":
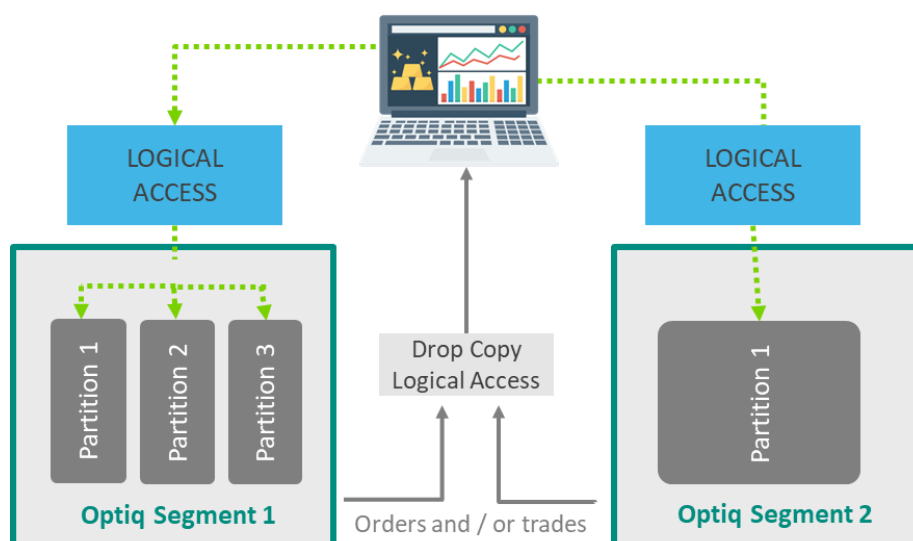
A Logical Access (LA) represents the logical access point to an Optiq segment. Members should have at least one LA per segment on which they have trading authorisations.

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 LA 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);
- Dedicated sessions for
  - Liquidity Providers (Cash markets)[1] and Market Makers (Derivatives markets)
  - RiskGuard.

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

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[1] On Cash markets, dedicated LAs for Liquidity Providers are not mandatory, clients can use standard sessions tagging orders as LP (see following sections)

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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
- 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
- Matched principal
- Any other trading capacity

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.

3.3 MARKET MAKING AND LIQUIDITY PROVISION

- **On the Derivatives markets:** Market Makers can fulfil their obligations using **Quotes** as well as **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".

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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 market.

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:

Indicates the nature of the change for clients
- *New service*: service is not currently available and will be offered in the context of the migration
- *Change of service*: service is already provided and will be enhanced, cancelled and/or modified. Rules, modalities, related mechanisms will be updated
- *No change*: service is already provided and will remain exactly as currently offered today
- *Not applicable*: service/functionality is not relevant to the market

Indicates if the change will impact current Borsa Italiana clients and/or legacy Euronext clients

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

Indicates if whether or not the change is required for the clients
- *Optional*: clients can choose if they want to implement the service / functionality If client already use this functionality, the change is considered as mandatory.
- *Mandatory*: change has to be implemented by clients – it is compulsory

Table of correspondence for the impacted markets is available in the section « Scope of the market migration ».
Equity: Cash Equity, **ETF**: ETFs & Funds, **W&C**: Warrants & Certificates – Structured Products, **FI**: Fixed Income, **Derivatives & Commodities:** Equity, Index & Commodity Derivatives

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

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 in 2023) 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 & Commodities
Self-Trade Prevention	Optional	Change of service	●	●		●	●
Execution prevention between Liquidity Providers	No change (under evaluation)						
Controls on dealing capacity	Mandatory	New Service	●	●	●	●	●
Uncrossing Auction	Mandatory	Change of service	●	●		●	●
Quantity and Notional Value controls at Order Entry	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	Under evaluation				●

- Order Types

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives & Commodities
(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 & Commodities
Strategy Trading on Derivatives Markets	Optional	Change of service					●
FIA Execution Source Code Schema (FIX Tag 1031)	Optional	New Service					●
Public Distribution Features	Optional	Change of Service			●		

MyEuronext – The new Euronext Member Portal

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

Regulatory Reporting

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

Files and Reports

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives & Commodities
(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 & Commodities
Collars	Mandatory	Change of Service	Under evaluation (out of W&C)				●

Corporate Actions

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

Technical Changes

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	Derivatives & Commodities
Recovery After Failure	Mandatory	Change of Service	●	●	●	●	●
Enhanced Front-to-Back Reconciliation process	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 & Commodities
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 & Commodities
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	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	●	●				●
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 & Commodities
(i) Market Orders	Mandatory	Change of service	●	●	●	●	●	●
(ii) Market to Limit Orders	Mandatory	New service	●	●	●	●	●	
(iii) Unpriced Limit orders	Mandatory	Change of service	●	●	●	●	●	
(iv) Iceberg Orders	Mandatory	Change of service	●	●	●	●	●	●
(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						●

- Other Trading Features

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Order Duration (GTD, GTC)	Mandatory	Change of service	●	●	●	●	●	●
Strategy Trading on Derivatives Markets	Mandatory	Change of service						●
Settlement date 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			●		●	
Derivatives Market Making Model & Monitoring	Mandatory	Change of Service						●
Public Distribution Features	Mandatory	Change of Service	●		●	●	●	

Market Data

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

Regulatory Reporting

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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 & Commodities
(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	●	●		●	●	●

Collars and Surroundings

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

Corporate Actions

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

Post-Trade

Change	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Post-Trade set-up	Mandatory	Change of Service	●	●	●	●	●	●

Technical Changes

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

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Some other changes are still under discussion such as the call phase opening time. 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 & Commodities
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	
TAH	Euronext Block (MTF)
ETF Plus	ETF & Funds
MIV	
SeDeX	Warrants & Certificates
Cert-X (EuroTLX)	
MOT	Fixed Income
ExtraMOT	
Bond-X (EuroTLX)	
IDEM	Equity Derivatives
	Index Derivatives
IDEX	Commodity Derivatives

Note:

- *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 LA.*

- *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 LA.*

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 & Commodities
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 & Commodities
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 & Commodities
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 & Commodities
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 & Commodities
Legacy Euronext Markets	No change (under evaluation)							
Italian Markets	Mandatory	Change of service					● 2	

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 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".

The "Execution Prevention Across LPs" facility will be implemented in Optiq for the Italian markets as follows:

▪ The trading capacity will be simplified and harmonised with the existing trading capacities in place for the legacy Euronext markets; the "Proprietary" trading capacity will be decommissioned , so the "Execution Prevention Across all firms" will be managed differently (details will be provided in due course);

▪ In the case of potential matching, if at least one of the two orders has "Execution Prevention across all firms" activated, the trade will not take place and the incoming order will be cancelled.

There is an exclusivity principle between the "Execution Prevention Across all firms" mechanism and the Self-Trade Prevention (STP) mechanism. The "Execution Prevention across all firms" mechanism cannot be managed and triggered at the same time as the STP mechanism.

The following priority is defined between the two mechanisms:

▪ Before executing a trade, Optiq will first check the "Execution Prevention across all firms" and, then, if this is not applicable, the STP.

Impact for legacy Euronext Markets

Currently, 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 Optiq "Execution Prevention across LPs" mechanism **will be replicated** for the EuroTLX market.

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[2] No CERT-X

4.4.5   Controls on dealing capacity

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Legacy Euronext Markets	Mandatory [3]	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.

<div align="center">

Impact for legacy Euronext Markets

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The application of new controls on dealing capacity is **under evaluation** for the legacy Euronext markets. If applicable, confirmation of the change and full details will be provided in due course.

<div align="center">

Impact for Italian Markets

</div>

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

Any order 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 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.

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[3] The application of new controls on the legacy Euronext markets is under evaluation

4.4.6 Closing and Official Price

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service			●		● 4	

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 & Official prices are calculated and current values will be disseminated via reference data and market data (Optiq® MDG).

Impact for legacy Euronext Markets

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

Impact for Italian Markets

The current mechanism in place for the legacy Euronext markets **will be extended** to Italian Warrants & Certificates markets (SeDeX & Cert-X).

For all other legacy 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.

4.4.7 Uncrossing Auction Price (& mechanisms)

	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		●		●	●	

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.

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4 Cert-X only

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 national value controls at order entry

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Legacy Euronext Markets	Mandatory[5]	Change of service	●	●	●	●		
Italian Markets	No change							

The specific controls at order entry currently available on Italian markets for Quantity, Size and Notional Value (or Nominal Value on Warrants & Certificates[6]) will be implemented on Optiq. Orders for which Quantity, Size or Notional Value exceed predefined thresholds are rejected.

Impact for legacy Euronext Markets

The application of additional controls on Quantity, Size and Notional 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 Notional Value in place for Italian markets **will be extended** into Optiq.

4.4.9 Indicative Matching Price validation at the end of call phases

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

The approach currently in place on Optiq will be extended for Borsa Italiana markets.

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

[6] 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.

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

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

Impact for Italian Markets

Currently on the Italian Cash 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 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.

4.4.10 Trading Halt

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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 adjusted and extended** onto Optiq.

4.4.11 Request For Quotes (RFQ)

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

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 Issuer 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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●				●

Deferred publication available for negotiated transactions in legacy Euronext Equities, ETFs and Derivatives 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 & Commodities
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;
- 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, as well as unexecuted orders that are resting in the order book;
- For Derivatives markets only, limit the maximum long and short positions of the controlled entity, considering all executed trades during the day.

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.

With the migration of Borsa Italiana to Optiq, Sponsored Access will be offered on both the legacy Euronext and Italian markets. 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. Full documentation on the enhanced RiskGuard service will be provided in due course.

Impact for legacy Euronext Markets

Currently, the RiskGuard service is only available for the legacy Euronext Derivatives markets. **The service will be extended to the legacy Euronext Cash markets** with all the additional features described above.

Therefore, Sponsored Access will be available for all 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 will be 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 & Commodities
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 will be 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 will be 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 will be implemented across all legacy Euronext and Italian market segments and systems.

The new Trade Unique Identifier is still being studied; however, its main characteristics 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.

Discussions are ongoing with the various CCPs with the aim that they can provide this same reference in the messages and reports they send to the clearing members. Further information will be provided in due course.

Impact for legacy Euronext Markets

Currently, clients are 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 will be considered as the official TVTIC** provided by Euronext (clients will no longer be required to calculate the TVTIC). The target TUI will facilitate 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.

The migration to the new TUI is planned to take place at the end of 2022, subject to regulatory approval.

Impact for Italian Markets

The new Trade Unique Identifier (TUI) **will be available for all Italian markets 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).

4.4.15 Trading At Last vs Closing Price Cross (CPX)

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

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

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:

1. insert orders only during CPX, i.e. Time in Force = Closing Price cross (CPX)
2. in the closing auction and (if unexecuted) in the CPX / TAL phase i.e. Time In Force set to "ACP"

Potential developments in future releases are under evaluation. More information will be communicated in due course.

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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service			●		● [7]	

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.

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[7] Cert-X Only

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;
- 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.

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

- Direct distribution model (will be made available on legacy Euronext markets);
- Possibility to set up products for professionals only;
- Post-trade set-up including bilateral netting settlement via Euronext Securities Milan (formerly Monte Titoli) (will be made available on legacy Euronext markets);
- Bid-only Before Buy-Back (currently known in Italy as Bid-Only Quote-Driven) (will be made available on legacy Euronext markets);
- 'Offer Only' will remain not allowed.

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, 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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service			●		●[8]	

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 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 delisting process of instruments knocked-out with the KOBI LP command is initiated at the end of the trading session, avoiding the need for additional delisting requests from the issuer. 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 & Commodities
Legacy Euronext Markets	No change							

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[8] Cert-X Only

			Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
Italian Markets	Optional	Change of service			●		●[9]	

Currently:

- On SeDeX there can be only one Liquidity Provider per ISIN (as already available for MiFID II Market Makers);
- On Cert-X there can be multiple Liquidity Providers on the same ISIN (as already available for MiFID II Market Makers).

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, 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.

(iv) Extended Hours for Warrants & Certificates

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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).

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[9] Cert-X Only

4.4.17 Order types

(i) Market Orders

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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:
   - The residual quantity of a standard Market order will remain available in the order book;
   - 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:
  - The last price at which the Market order has been partially executed, if entered during the continuous phase; or
  - 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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	New service	●	●	●	●	●	

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).

Impact for legacy Euronext Markets

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

Impact for Italian Markets

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

(iii) Unpriced Limit orders

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

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

Derivatives

On the Italian Derivatives markets, Iceberg orders **will be no longer 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 MiFID II LIS order size, 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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service						●

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 (*activated*, that is 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;
- 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 a Stop order can be triggered by a validated call price (and will not take part in the uncrossing process but will enter the 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

The current Stop order functionality will continue to be available **<u>with no change</u>** on the legacy Euronext markets.

Impact for Italian Markets

On the Italian Derivatives markets, the existing Stop order functionalities will be replaced by a new order type which will be developed in Optiq, focusing on the key features that are currently used on the Italian Derivatives markets. One of the main differences to note is that the Stop at Bid / Ask prices will no longer be available.

(vi) (Limit) Stop-On-Quote

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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 **<u>with no change</u>** 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 & Commodities
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

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

The "Named Order" order 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 & Commodities
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 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. Warrants & Certificates and Fixed Income.

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 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 & Commodities
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:
  - 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 & Commodities
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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Mandatory	Change of service	●	●	●	●	●	●

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 these orders on all the legacy Euronext markets, that is, 364 days.

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).

GTD/GTC orders will be activated on both the SeDeX and Cert-X markets (feature currently not available).

4.4.19 Strategy Trading on Derivatives markets

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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 the Sell of one expiry and the other leg the Buy of the following expiry, for all combinations of consecutive expiries) on the Index Futures Contract will be available as they are currently on Italian derivatives 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 and stock-contingent strategies (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.

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.

4.4.20 Settlement Calendar and Trades Settlement Date dissemination

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

4.4.21 Order Source code

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

4.4.22 FIA Execution Source Code scheme (FIX Tag 1031)

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

A new optional field called *Execution Source Code* will be added to the order and quote entry messages on the Optiq Derivatives market, in both SBE and FIX protocols (standard FIX Tag 1031). The simplified "FIA Execution Source Code Scheme" aims to clearly identify the execution method used for ETD trades at the point of origin, allowing executing and clearing brokers to easily reference the appropriate brokerage rate for the execution method.

The "Execution Source Code", often referred to as "Tag 1031" will be implemented in the Optiq Matching Engine, and after the migration will be available across all Derivatives markets (legacy Euronext and Italian markets).

Impact for legacy Euronext Markets

The "*Execution Source Code*" will be a single character field available in order and quote messages using one of the following codes as per FIA guidelines:

- W: "Desk";
- Y: "Electronic";
- C: "Vendor-provided platform billed by Executing Broker";
- G: "Sponsored Access via Exchange API or FIX provided by Executing Broker";
- H: "Premium Algorithmic Trading Provider billed by Executing Broker";
- D: "Other, including Other-provided Screen".

The "Execution Source Code" will be optional. If the field is left empty by the trading member, it will be automatically populated with "Y" in the trade messages. The use of the new field is optional.

Impact for Italian Markets

The "Execution Source Code" field will continue to be available for Italian Derivatives markets after the migration. Additional information about the availability of the "Execution Source Code" field at the CCP level will be provided in due course.

4.4.23 Bid-Only trading for Warrants & Certificates

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

Impact for legacy Euronext Markets

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

Impact for Italian Markets

Currently, on the SeDeX market:
- When the Specialist acts in Bid-Only, trading is allowed during the *Frozen Period* in the range determined by the (Bid) quote of the Specialist and a virtual Ask price calculated with 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.

4.4.24 Quoting Period

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

Both SeDeX and EuroTLX currently have a Quoting Period, which will be replaced by the Optiq Call phase.

Impact for legacy Euronext markets

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

Impact for Italian Markets

SeDeX and Cert-X

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

EuroTLX Equities and Bond-X

The Quoting Period is the starting phase/session of each instrument in the EuroTLX qw market. This phase is dedicated to Liquidity Providers and is enabled on each individual

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

instrument. During this phase, only the authorised Liquidity Providers can insert quotes, while other members cannot submit orders. Trading is always prevented during the quoting period and in the case of potential matching between two LPs' quotes, both quotes are cancelled.

At the end of the quoting period, all active quotes 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 trading;
- When potential matching exists between an Incoming order and a Resting order, both orders will be rejected.

4.4.25 Derivatives Market Making Model & Monitoring

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

Impact for legacy Euronext Markets

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

Impact for Italian Markets

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, the existing Responding MM role 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.

4.4.26 Public distribution features

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

Introduction of the new functionality on legacy Euronext Warrants & Certificates markets is **under evaluation**.

Impact for Italian Markets

"Issuing and Buyback" 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).

These Issuing and Buyback functionalities will be implemented in Optiq.

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			●	●	●	●	●	●	●
Commodities energy (IDEX)				●	●			●	●
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 & Commodities
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;
- 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 & Commodities
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. Subject to regulatory approval, the change is expected to take place in advance of the migration of Italian markets to Optiq.

Impact for Italian Markets

Transaction Reporting for non-MiFID firms on Optiq markets is executed via tge **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 & Commodities
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 & Commodities
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 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 & Commodities
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 & Commodities
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 & Commodities
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. existing

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 & Commodities
Legacy Euronext Markets	Mandatory	Change of service	Under evaluation (out of W&C)					●
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.
Impact of the changes for Cash legacy markets is still under assessment.

Derivatives

The current model will be **slightly adjusted** on legacy Euronext Derivatives markets with a new collar functionalities to be developed on Optiq for FSP.
Future Spike Protection (FSP) will be modified. FSP in the auction and continuous phases will work as a trade validation parameter with an option to select market halt, as a replacement for the current collar freeze. This is to secure an orderly implementation of stop orders.

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** (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 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 liquid futures will be represented by the Future Spike Protection (FSP) functionality. Any attempt to breach either the Collars or the FSP boundaries on liquid futures 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 & Commodities
Legacy Euronext Markets	No change							
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 Market Operations for an Optiq segment, a public *MarketStatusChange* message is sent via Market Data for each contract 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 for each contract in that Optiq segment to notify clients).

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 & Commodities
Legacy Euronext Markets	No change							
Italian Markets	Optional	Change of service						●

Impact for legacy Euronext Markets

There is **no change** in the dissemination of Open Interest in scope for the legacy Euronext markets.

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 & Commodities
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 legacy 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 flag in the Reference Instrument market data feed. This new flag, "*Corporate Action Modifier*", 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. Trading participants and clearing members are invited to analyse the impact on their side.

The legacy Italian Derivatives market systematically assigns a new ISIN code on the adjusted instrument further to corporate actions, while on the legacy Euronext Derivatives markets, any corporate actions adjustment leaves the ISIN code of the instrument unchanged.

4.11 POST TRADE

	Change criticality	Type of change	Equity	ETF	W&C	FI	ETLX	Derivatives & Commodities
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.

After the migration from the current derivatives trading platform to Optiq**, the current process** (based on the Trader ID, which for Italian Derivatives markets is sent to the CCP and currently can be used to send trade allocation instructions to the CCP) **will change and will rely on a process based on the "Account Number",** which is a field already available in the Optiq Order Entry Clearing Aggregate and will correspond to the clearing account open in the CC&G 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 Code*" is sent to the CCP.

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 & Commodities
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 & Commodities
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 & Commodities
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.

4.13 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:

- CMC (Client Managed Connectivity) - directly to Aruba and/or from the London PoPs;
- Aruba colocation;
- Borsa Italiana CMC and Bit Network;
- Borsa Italiana colocation (until the end of the migration);
- via Service Providers connected to Euronext markets.

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