

BORSA ITALIANA MIGRATION TO OPTIQ Migration Guidelines

For Trading Members and Service Providers

May 2023



CONTENTS

1	. II	NTRODUCTION	. 4
	1.1.	Document purpose	. 5
	1.2.	Target audience	. 6
	1.3.	Document history	. 7
2	. м	IGRATION: HIGH-LEVEL SCOPE	Q
_	2.1.	Scope of the market migration	
	2.2.	Migration principles	
		Post Trade	
		Key migration topics	
		Markets monitoring and platform management	
		Trade Unique Identifier – Trading Venue Transaction Identification Code (TVTIC) and	
		tion ID Change	
		Euronext File Transfer Systems	
		Transaction Reporting	
		SLC Management	
		Commodity Derivatives Position Reporting	
		Member portal	
		Upgrades for legacy Euronext Markets	
		SBE Templates (OEG and MDG)	
_			
3		IGRATION PLAN	
		Migration Plan overview	
	3.2.	Key milestones in the migration	
	3.3.	Contingency plan	26
4	. C	ONNECTIVITY READINESS	27
	4.1.	Clients currently connecting to the Italian markets via colocation	28
	4.2.	Clients currently connecting to the Italian markets via other options	30
	4.3.	Testing Order Entry Connectivity to Production and Disaster Recovery environments	32
5	. A	CCESS MANAGEMENT	33
_		Registration & access to the Euronext Connect portal and completion of onboarding	
	pack		
		Steps to obtain access to the Next EUA environment	36
		Ordering Logical Access (Order Entry Sessions) to connect to Next EUA	
		Ordering Drop Copy Logical Access for Next EUA	
		Access to Saturn, the Euronext Reporting tool	
		TCS access set-up	
	5.3.	Steps to get access to the Production environment	38
		Ordering Logical Access (Order Entry Sessions) to access Production	
	5.3.2.	Requesting Drop Copy access for the Production environment	39
	5.3.3.	Access to Saturn in the Production environment	40
	5.3.4.	TCS access set-up in the Production environment	40
	5.4.	Connection set-up to MyEuronext	40
	5.5.	RiskGuard Access in Next EUA and Production	41
		41	
6	T	ESTING IN NEXT EUA	42
		Next EUA availability	
	6 1 1	Next FUA availability	44

	6.1.2. Saturn testing availability 6.1.3. High Availability testing availability 6.2. CCP testing platform availability 6.3. Functional tests 6.3.1. Testing of new functionalities in Next EUA 6.3.2. High Availability testing in Next EUA 6.3.3. Saturn testing in Next EUA 6.3.4. Drop Copy testing in Next EUA 6.3.5. Throttling testing in Next EUA 6.3.6. Market Data Gateway (MDG) testing in Next EUA 6.3.7. TCS testing (GUI and OEG) 6.3.8. Conformance testing in Next EUA 6.3.9. Front-to-Back testing in Next EUA 6.4. Test scenarios and webforms	. 45 . 45 . 46 . 46 . 47 . 48 . 48 . 49 . 51
7	,	
	7.1. Contractual management and legal documents	
	7.1.1. Membership	
	7.1.2. Access to and use of Optiq®	
	7.1.3. Data Centre access, use and connectivity	
	-	
8	GO-LIVE	
	8.1. External dress rehearsal	
	8.2. Roll-Back plan	
	8.3. Freeze period	
9	. KEY OPERATIONAL DOCUMENTATION	
	9.1. External specifications	
	9.2. Communication principles	
	9.2.2. Communication sequence	
_	·	
1	0. CUSTOMER JOURNEY CHECKLIST	
	10.1. Trading Members	
	10.2. Independent Software Vendors (ISVs)	
	10.4. Data Vendors	
	10.11 Data Volido10 11111111111111111111111111111111111	. , ,
^	APPENDIX	70
H	Migration Timeline Phase 2	
	riigi autori Tiitieliile Filase Z	. /0
_		
C	CONTACTS	79

1. INTRODUCTION



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® systems.

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. It delivers a simplified harmonised messaging model with maximum flexibility, within a single trading platform for Cash and Derivatives, providing clients with high performance and stability.

The move to the Optiq platform allows Euronext to deliver an access model that is streamlined across markets, leveraging 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 of each functionality, the implementation will be done before, during or after the migration of Borsa Italiana markets to Optiq.

1.1. DOCUMENT PURPOSE

The purpose of this document is to provide clients with **information and target timings regarding the migration strategy of the Borsa Italiana markets to Optiq** so that they can prepare for a successful migration.

This document aims to give **guidance on how the migration plan will be rolled out** and what will be expected from our clients – Trading Members and Providers (ESPs, ASPs, ISVs, Data Vendors) – along the way.

This version of the document mainly focuses on **Phase 2 of the migration** impacting Warrants & Certificates, Fixed Income and EuroTLX markets.

This document is for informational purposes only, and should be consulted alongside other documents about the migration.

For more information regarding the functional changes related to the migration of Borsa Italiana markets onto Optiq, please refer to the Guide to Trading System available on the Euronext or the Borsa Italiana websites.



1.2. TARGET AUDIENCE

The intended audience of this document is any client of trading activities (Trading Member Firm, ASP, ESP, ISV, Data Vendor)¹ on the:

- Legacy Euronext markets: already connected to Optiq® for the other markets operated by Euronext
- <u>Italian markets:</u> connected to Borsa Italiana markets and moving to Optiq[®], TCS and/or Saturn (reporting) features

In this document, some sections are separated into two categories based on the client's current set-up. Clients should check the category relevant to them carefully, keeping in mind the following principles:

This covers: - Clients trading on the Italian markets only who are not yet connected to Optiq® and related services. These clients must fully complete their onboarding process, set up all their access and perform complete testing. - Clients already connected to Optiq for other legacy Euronext markets who do not wish to use their existing set-up, systems and infrastructures to manage their trading on the Italian markets on Optiq. Note: these clients should follow the contractual membership steps for "common clients". This covers: - Clients already connected to Optiq® for other legacy Euronext markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and markets and wishing to use their existing set-up, systems and set use their existing set use their existin	the following principles:					
markets who do not wish to use their existing set-up, systems and infrastructures to manage their trading on the Italian markets on Optiq. Note: these clients should follow the contractual membership steps for "common clients". This covers: - Clients already connected to Optiq® for other legacy Euronext		 Clients trading on the Italian markets only who are not yet connected to Optiq[®] and related services. These clients must fully complete their onboarding process, set up all their access and perform complete testing. 				
- Clients already connected to Optiq® for other legacy Euronext	markets	markets who do not wish to use their existing set-up, systems and infrastructures to manage their trading on the Italian markets on Optiq. Note: these clients should follow the contractual membership				
infrastructures to manage their trading on the Italian markets.		 Clients already connected to Optiq® for other legacy Euronext markets and wishing to use their existing set-up, systems and 				

Clients are strongly encouraged to review the information at the end of this document summarising all the steps they have to perform in the context of the migration of Borsa Italiana onto Optiq.

¹ Please note that dedicated migration guidelines for issuers will also be issued.



1.3. DOCUMENT HISTORY

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

Document version	Date	Change Description	
1.0	04.07.2022	Initial version of the document	
2.0	27.07.2022	Addition of Phase 2 Go-Live milestones	
3.0	21.12.2022	Addition of full Phase 2 timeline (across all sections) Addition of webforms links for testing (section 6) Update of Phase 1 timeline (across all sections) Addition of Phase 1 Prod details (across all sections) Addition of freeze period details (section 8.3) TUI delivery dates modification (section 2.4.2) Update of Customer checklist (section 10) Addition of timelines in Appendix	
3.1	01.02.2023	Update of the Conformance test guidelines (section 6.3.8)	
4.0	18.05.2023	Addition of Phase 3 Go-Live date (section 3.1) Addition of contingency plan for Phase 2 (section 3.3) Update of guidelines focused by Phase 2 (across all sections) Addition of the specifications communication approach (sections 2.4.9 and 9.1) Update of the TVTIC section (section 2.4.2)	





2.1. SCOPE OF THE MARKET MIGRATION

The Euronext proprietary trading system, Optiq[®], will become the single trading platform for accessing all Euronext Cash and Derivatives markets.

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

	Italian Markets	Migration to Optiq®?	Optiq [®] Segments
	Euronext Milan	✓	
	Euronext Growth Milan (EGM)	✓	
	Bit GEM	✓	Cash Equities
	Equities (EuroTLX)	✓	
	Euronext MIV Milan	✓	
	TAH	✓	Euronext Block (MTF)
Cash	ETF Plus	✓	ETFs & Funds
	ATFund ²	✓	EIFS & Fullus
	SeDeX	✓	Structured Products
	Cert-X (EuroTLX)	✓	(Warrants & Certificates)
	Bond-X (EuroTLX)	✓	
	MOT	✓	Fixed Income
	ExtraMOT	✓	
	IDEM		Equity Derivatives
	IDEM	Y	Index Derivatives
Derivatives	IDEX	✓	Commodity Derivatives
	AGREX	*	N/A

Notes:

- 1. **MTS** is not in the scope of the migration to Optiq
- 2. **Public distribution** will be activated only on the relevant markets



² Hosted on TCS

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

	Products & Services	Markets	Current platform	Target platform
	Cash Equities	Euronext Milan (MTA), Bit GEM, EGM, TAH, MIV, ETLX Equities	Millennium	
Cash	ETFs & funds	ETF Plus, ATFund*	Millennium	
<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	Warrants & Certificates	SEDEX, ETLX (Cert-X)	Millennium	
	Fixed Income	MOT, ExtraMOT, ETLX (Bond-X)	Millennium	Optiq
Derivatives	Equities & Index derivatives	IDEM	SOLA	
Deriv	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
Regui	Short-Long Code (SLC)	ALL	Borsa Member Portal	Saturn

^{*}ATFund is hosted on TCS



2.2. MIGRATION PRINCIPLES

This section provides a high-level description of the main migration principles and the developments required from clients (both clients that are already connected to the Optiq trading platform and/or market data feed, and clients that are not yet connected). Further details may be added as the migration progresses.

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

- As the Italian markets will join the Optiq Central Order Book (COB), clients will be able to trade Italian instruments via the same Logical Accesses (LAs) they use for all other Euronext instruments hosted on the same segment (Liquidity Providers will need extra LAs to fulfil their obligations on Italian Fixed Income markets);
- The post-trade (clearing and settlement) set-up and rules will remain unchanged for Borsa Italiana's markets. Optiq will be connected to Euronext Securities Milan (formerly Monte Titoli), Euronext Clearing (formerly CC&G), Cboe Clear Europe (formerly EuroCCP) for Preferred Clearing only and LCH Ltd for Preferred Clearing only. There are limited technical adjustments on the post-trade stream for clients. Two changes were highlighted during Post Trade Committees which require non-regression testing to ensure operational continuity. The changes are related to the replacement of the COMP ID by the Firm ID (1) and the use of the Euronext Trade Unique Identifier (2) in the overall trade reconciliation process;
- 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;
- Clients who 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:

- As part of the migration, **Euronext will accelerate its digitalisation programme**. Clients will benefit from new applications ('apps') accessible via the Connect customer portal to manage Logical Accesses, RiskGuard, Market Making set-up, contacts and file transfer for both Italian and legacy Euronext markets. For Italian markets, the other membership details will remain available in the Borsa Italiana Member portal until all functionalities are migrated to MyEuronext. Some other processes, such as onboarding on migrated markets may need to be managed on paper until the new functionalities are available. Information on this specific interim process may be provided upon request. Specific apps will also be made available for the issuers of financial products; specific documentation and migration guidelines will be provided in due course.
- 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 for both trading and market data services as well as on file transfer systems will be required, either done internally (for in-house applications) or by a third-party vendor;
- For legacy Euronext markets, functional changes related to the migration to Optiq have already started. We therefore encourage clients to review the impacts of those changes



to their systems as soon as possible using the documentation provided³ and liaise with their providers if needed.

Euronext will keep clients updated regularly via announcements sent to clients and webinars organised throughout the project.

2.3. POST TRADE

Clients of Italian markets

Current CCP for Phase 2 markets and for Derivatives, i.e. Euronext Clearing (formerly CC&G), is connected to Optiq in order to continue to provide clearing services on guaranteed transactions on Borsa Italiana markets.

Euronext Securities Milan (formerly Monte Titoli) is also directly connected to Optiq, in particular to continue providing settlement services for non-guaranteed transactions on Borsa Italiana Cash markets as they equally provide to Euronext Clearing for guaranteed transactions.

Specific milestones related to post-trade activities are described in the Migration Timeline Table in the next section.

Trading members must ensure that they have valid clearing arrangements with a clearing member (for guaranteed trades) and a settlement agent (for non-guaranteed trades) on the Euronext Cash and/or Euronext Derivatives markets (as applicable) in order to be authorised to trade on the Italian Markets.

The clearing systems of the CCPs – Euronext Clearing – as well as the settlement system of Euronext Securities Milan are connected to the Euronext Next EUA (External User Acceptance) environment in order to allow clients to complete full Front-to-Back tests with a post-trade set-up (e.g. CED code) that is equivalent to the one they currently have.

Clients of legacy Euronext markets

No change will take place before the migration of the Italian markets to Optiq.

In parallel to the Borsa Italiana migration programme to Optiq, the Euronext Clearing migration programme has been launched. Euronext Clearing will become the default CCP on Euronext Amsterdam, Brussels, Dublin, Lisbon and Paris cash equity markets from October 2023⁴. No functional nor technical changes are expected from a trading perspective. Clients will, however, be asked to conduct front-to-back tests with their Clearing Members in due time, and to verify that their Clearing Members have signed the contractual agreements with Euronext Clearing prior to go-live.



³ Guide to Trading System and specifications available on Connect

⁴ Subject to regulatory approval

2.4. KEY MIGRATION TOPICS

2.4.1. Markets monitoring and platform management

During the migration period, clients of the Italian markets will have to manage different platforms in parallel following the sequencing of the migration:

Borsa Italiana clients trading on:	Before Phase 1	Between Phase 1 and Phase 2	Between Phase 2 and Phase 3	Post-Phase 3	
Cash Equities	Millennium		Optiq		
ETFs & Funds		Optiq			
Warrants & Certificates	Millennium Optiq			tiq	
Fixed Income					
Equities, Index Derivatives & Commodities	SOLA	SOLA	SOLA	Optiq	

In line with Euronext's federal model, which provides clients with a single order book and single pool of liquidity, the Borsa Italiana markets will be operated on the same infrastructure as the other Euronext markets.

2.4.2. Trade Unique Identifier – Trading Venue Transaction **Identification Code (TVTIC) and Execution ID Change**

A new field **Trade Unique Identifier (TUI)** has started to be used as the single identifier for trades across the market chain, from orders execution to clearing and is disseminated within OEG, MDG and Drop Copy. It will ultimately be the code used by all stakeholders to identify a trade.

The construction of the Trading Venue Transaction Identification Code (TVTIC) has been modified to continue to guarantee the unique nature of the code, and to meet regulatory obligations while optimising the size of the field. This change applies to all Euronext markets, including the Italian markets.

As already communicated, the new TUI/TVTIC format is an alphanumerical code that is unique, consistent and persistent per ISO10383 segment MIC and per trading day, assigned by the trading venue to a transaction, and with a maximum length of 10 characters. Previously, trade identifier was Execution ID + ISIN for legacy Euronext clients, and numerical code for Borsa Italiana clients.

<u>Legacy Euronext clients:</u>

Euronext has implemented in Q4 2022 the Trade Unique Identifier (TUI) as the new TVTIC for trade reporting.



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

The change has already been implemented in Next EUA on 5 April and is available for testing. It will be implemented in Production on 17 July 2023.

Trading Members must perform full front-to-back testing with their Clearing Member Firms to ensure complete readiness for this change.

Clients must use the reconciliation key indicated in this table:

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

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

Clients of Italian markets

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

Apart from technicalities, there will be no functional change for clients of Italian markets (as the field is already provided in the trade message at order entry level).

An explanation of the TVTIC format can be found in the Optiq MDG and OEG client specifications available on the **Euronext Connect** customer portal. Information related to the new TUI can also be found in **this communication**.

Prior to the Go-Live date for the markets they are connected to, customers are strongly advised to validate the proper integration of the new TVTIC format by performing testing in the Next EUA Environment.

Impact for Clearing Members and Settlement Agents



Front-to-Back reconciliation for clients 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 clearing systems, using the same logic for all Euronext markets.

Clients are invited to use the TUI for their Front-to-Back reconciliations, including end-of-day reconciliations with CCPs and to perform non-regression testing for this purpose.

The TUI has been implemented for guaranteed trades on the following CCPs for the legacy Euronext markets and Italian markets:

- Euronext Clearing former CC&G
- Cboe Clear Europe (ex EuroCCP)
- SIX x-clear
- LCH Ltd.

Euronext Securities Milan and settlement agents will also be involved in the scope of reconciliation tests for the path of non-guaranteed transactions.

Clearing Members must perform a full front-to-back non-regression test with their Trading Member Firms, for all CCPs they are connected to, for all Euronext markets.

2.4.3. Euronext File Transfer Systems

A new file transfer platform (CFTS) is being made available to share files between Euronext and clients (Trading Members, issuers, third-party vendors, etc), allowing them to download and upload files directly.

CFTS will be accessible through two protocols:

- SFTP: dedicated secured file transfer protocol optimised for massive upload and download
- HTTPS: web-oriented platform with a GUI (MyEuronext)



The implementation of the new file transfer service will follow the phased approach for the migration to allow a smooth transition:

	Content	Delivery Date	Clients already using ENXT HTTPS file transfer solution	Clients using Borsa Italiana file transfer solution
Phase 1: SFTP	Customers will access CFTS through one communication protocol (SFTP) with no dedicated User Interface (GUI). Delivery details will be communicated by type of file.	Progressively delivered between September 2022 and March 2023. Parallel run with previous infrastructure is be maintained, including after Phase 1 Go-Live ⁵ .	√ Optional	√ Mandatory
Phase 2: SFTP + HTTPS	In addition to SFTP protocol, customers will be able to access CFTS through HTTPS. HTTPS protocol will be enabled through the new MyEuronext web portal. Delivery details will be communicated by type of file.	Progressive deliveries between April and September 2023. Please refer to dedicated communication for further information.	√ ⁶ Mandatory	√ Mandatory

The CFTS platform will handle several types of files as described below:

Type of File	Upload	Download	File description	Delivery
Referential Data (formerly EFS)	x	√	All referential data dedicated to trading members	Phase 1
End Of Day	x	\checkmark	All daily trades information & order	Phase 1
ETF Corporate Actions	√	√	Corporate Actions for ETF	Phase 1
SLP	x	√	Supplemental Liquidity Provider Universe	Phase 1
PCF	√	√	Portfolio Composition	Phase 1
Securitised Derivatives (Warrant) CA	√	√	Corporate Actions for Warrants	Phase 2
Regulatory Files	x	√	Regulatory such as MiFID RTS 8 and 9	Phase 1
Reconciliation Files	x	√	Files provided in case of incident impacting the post trade processing of transactions to facilitate reconciliations or any other kind of private file	Phase 1

⁶ Legacy protocols will be decommissioned. More details on related timeline will be shared in due course.



 $^{^{5}}$ The date for the decommissioning of the current infrastructure will be provided in due course.

Clients of Italian markets

All clients will have to use the SFTP solution (EUA & PROD) to download and upload the different files. For that purpose, Phase 2 clients should already have requested their access to CFTS in EUA through MyEuronext, while other clients are requested to do so (see chapter below).

For the migration to the HTTPS solution, clients will be able to request accesses directly through the new MyEuronext web portal. For the time being, clients are strongly encouraged to secure their ability to use the SFTP solution.

Clients of legacy Euronext markets

Clients already using the current Euronext file transfer solution can decide when they want to migrate to the new upgraded infrastructure.

To prepare for the migration, regardless of the chosen solution (SFTP or HTTPS), clients must request access via MyEuronext.

Note that before using MyEuronext, clients will need to be configured by the Market Access team and the relevant member company needs to sign the MyEuronext Terms & Conditions.

There will be a parallel run period allowing clients to continue using the legacy version of the HTTPS File Transfer solution before fully migrating to the new CFTS Solution (SFTP and/or new HTTPS protocol). More information about the decommissioning of Euronext's current HTTPS solution will be provided in due course.

Technical documentation for Referential Data and Reconciliation Files can be found on the **Euronext Connect** customer portal.

Further information on Referential Data (ex EFS) is available on the **Euronext Connect** customer portal. Documentation on End of Day files will be communicated in due course.

A User Guide to CTFS is available on **Euronext Connect** customer portal.

2.4.4. Transaction Reporting

Clients of Italian markets only

Transaction Reporting for non-MiFID Firms on Italian markets will remain unchanged until after the last step of the migration (Phase 3). Non-MiFID members will continue to report their transactions via Unavista or BITA's files server. The reporting process on Italian markets will be entirely automated after Phase 3. Information on the change of process will be communicated in due course.

Clients of legacy Euronext markets

Changes that will take place on transaction reporting for legacy Euronext clients are related to:

- The use of the new format of identifier (TVTIC) for RTS22 reporting Please refer to the dedicated chapter of the document.
- The reporting, for Non-MiFID Firms already using Saturn, of their transactions on legacy Euronext markets. Firms will have to adjust their existing set-up to report the



Italian markets MIC Code XMIL (in addition to the information already reported for existing legacy Euronext markets).

2.4.5. SLC Management

Clients of Italian markets

Management of the MiFID II Short / Long Codes on Italian markets is currently done via the Borsa Italiana Member Portal. As part of the Italian markets migration to Optiq, clients will have to migrate to the **SLC Manager** within **Saturn**, in the same way as for other legacy Euronext markets.

During the migration period, Borsa Italiana clients managing different markets that are not migrated at the same time will have to upload SLCs from two different systems:

- SLC Manager on Saturn for markets that have already migrated to Optiq (the use of Saturn will start from the migration weekend of each set of markets)
- Borsa Italiana Member Portal for markets still on the legacy Italian platforms

For further documentation on Saturn SLC Manager, please refer to the following documents:

- 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

Available in the **IT documentation** page on the Euronext Connect customer web portal.

Clients of legacy Euronext markets

For clients that do not trade on Italian markets, no change to SLC Management is needed.

2.4.6. Commodity Derivatives Position Reporting

Clients of Italian markets

Commodity Derivatives Position Reporting for Italian will remain unchanged until after the last step of the migration (Phase 3). Further information will be communicated in due course.

Clients of legacy Euronext markets

For clients that do not trade on Italian markets, **no change on commodity derivatives position reports** is needed.

2.4.7. Member portal

Euronext will replace the current Borsa Italiana Member Portal with a new Euronext group-wide portal called MyEuronext. Over the next few months, **services will move gradually from the current portal(s) to MyEuronext**, starting with the management of Logical Accesses. Services will continue to move in line with the migration schedule and following the migration.



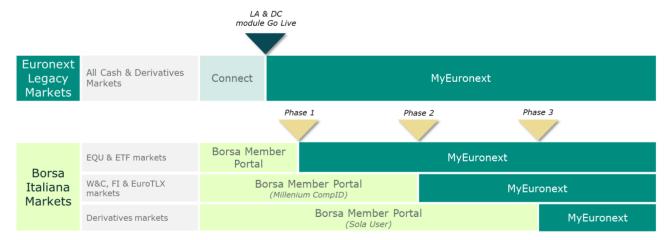
The strategy for the migration to MyEuronext will follow different delivery approaches:

- Borsa Italiana members should continue to use the current Borsa Italiana Member Portal until the necessary features are available in MyEuronext and markets have been migrated.
- For the creation, amendment or deletion of Logical Access and Drop Copy sessions for Phase 2 of the migration, requests will be managed via the Initial Set-up Form for both Next EUA and Production environments. The current Borsa Italiana member portal will not allow the request of Logical Accesses in EUA and PROD for the migration to Optig. Borsa Italiana clients who are already connected to Optiq can also manage their access via MyEuronext. Clients who are not yet connected to Optiq will be able to manage their accesses via MyEuronext once migrated onto Optiq.
- For some other functionalities such as set-up of Market Makers and Liquidity Providers, the relevant enhancements to the MyEuronext portal will be made in line with the phased approach of Borsa Italiana migration to Optiq.
- Other functionalities such as membership onboarding or market extensions will be provided as soon as available on MyEuronext. More detailed communication will be issued in due course.

The implementation of the new portal will lead to the decommissioning of some existing functionalities currently available in Connect, and the decommissioning of the Borsa Italiana Member Portal after the migration onto Optiq. More information on the delivery timeline of the widgets in MyEuronext will be communicated in due course.

Managing Logical Accesses

The below chart shows the migration strategy for the management of logical accesses from the current member portals to MyEuronext.



For the Borsa Italiana migration onto Optiq,

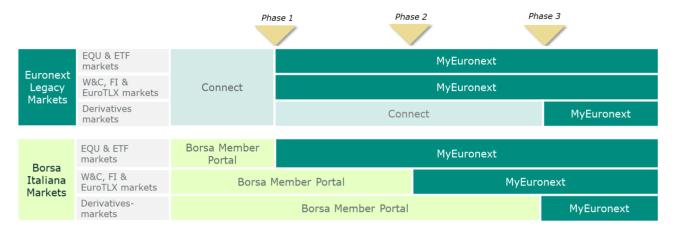
Phase 2: clients need to request their EUA and PROD access via forms; however clients already connected to Optiq can also manage their accesses via the MyEuronext portal.

Please refer to the Access Management section.



Managing requests for Market Making and Liquidity Provision activities

The below chart indicates the migration strategy for the management of requests in relation to Market Making and Liquidity Provision activities, from the current member portals to MyEuronext.



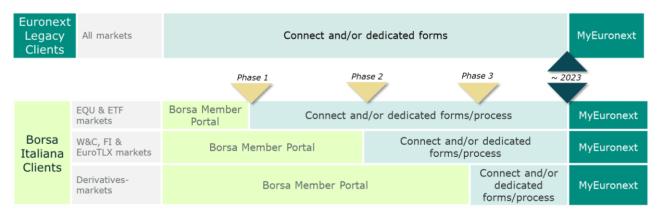
For the Borsa Italiana migration onto Optiq,

• **Phases 1 and 2**: signature of the agreement and registration will be managed offline. Following this, clients will be able to manage their product registration through MyEuronext as necessary, once available

Other functionalities in Member Portal

Other functionalities (including onboarding of a new firm and market extension processes) will be managed by Euronext following a dedicated process until their Go-Live on MyEuronext.

The Borsa Member Portal will gradually be adjusted, with the functionalities moving to MyEuronext in line with the steps of the migration of the different widgets.



User roles in MyEuronext

Profiles and user roles will be harmonised between Borsa Italiana and Euronext. Correspondence between current Borsa Italiana roles and target Euronext roles for the use of



MyEuronext can be found below.

Borsa Italiana current user roles	Euronext target roles	Description
Legal Representative	Authorised Signatory (AS)	Has the legal authority to sign on behalf of the company
Contract Representative	Authorised Representative (AR)	Designated by the Member Firm to act and sign documents on behalf of the company, is authorised to appoint the RPs and MyEuronext Users (including MCAs)
Compliance Officer	Responsible Person (RP)	In charge of the Member's trading activity with Euronext
IT Company User	Member Connectivity Administrator (MCA)	In charge of the Member's connectivity with Euronext
N/A Company User Administrator (CUA)		Appointed in the T&C to manage users' access rights for the company with Company Settings module. AR are Company User Admin by default

2.4.8. Upgrades for legacy Euronext Markets

As indicated in the **Guide to the Trading System**, some of the functional changes planned for the Borsa Italiana migration will also be applied to the legacy Euronext markets. In order to mitigate the risks for clients, Euronext is progressively integrating these changes into Production prior to the migration of Italian markets onto Optiq. These changes (fields creation, new values, etc.) will partially or fully impact clients when delivered.

We strongly advise clients trading on legacy Euronext markets to carefully manage the changes and to pay careful attention to the Operational Notices published alongside the external specifications to assess all impacts of each delivery on their current systems.

2.4.9. SBE Templates (OEG and MDG)

SBE templates for Order Entry and Market Data on Cash and Derivatives markets are upgraded regularly for the Borsa Italiana migration to Optiq.

These templates are driven by various projects, one of them being the Borsa Italiana migration onto Optiq. For each delivery of a new SBE template, a dedicated communication will be issued providing details of the changes and including updates of specification.

Each technical or functional change that impacts clients may result in a new version of the external specifications. Specification versions are associated with a SBE version number that informs clients of the minimum SBE version that is essential for the new functionalities. This leverages the backward / forward compatibility principles of Optiq.

External specifications will be updated along with the project delivery and shared through Operational Notices informing about the nature of the changes and the tests expected from clients.

It is key that trading members and providers fully understand Euronext's SBE compatibility rules and develop according to these, in order not to be impacted by subsequent evolutions.



Clients that do not wish to support new features embedded in a new version of the SBE template can continue to use the former SBE versions in their applications provided they are backward/forward compatible.

Note that SBE changes will regularly take place along with the delivery of the functional changes implied by the migration onto Optiq.

For new clients, specific tests will be organised to ensure that their software properly handles the backward/forward compatibility mechanisms embedded in Optiq.

For clients already connected to Optiq and trading on legacy Euronext markets, technical documentation will be issued on a regular basis. Three batches of specifications will be shared with clients before the end of the Phase 2 of the migration.

The below chart provides an overview of the SBE schedule delivery for Phase 2 of the migration, up until SBE template version 325



Cash: Cash Markets / Derivatives: Derivatives Markets
(1)Warrants & Certificates, Fixed Income and Bourse De Luxembourg / (2) Equities, Funds (ETP), Block

For all details of these batches, please refer to the **SBE Upgrade and Delivery Schedule v2** document.

See section dedicated to this topic.

As a reminder, SBE stands for Simple Binary Encoding. It is an OSI layer-6 presentation for encoding and decoding binary application messages with the main purpose of supporting low-latency financial applications. SBE is a FIX standard for binary message encoding: FIX Simple Binary Encoding. SBE provides a language-independent type system supporting integers, floating point numbers, characters, arrays, constants, enums, bitsets, composites, grouped structures that repeat, and variable length strings and blobs. Clients can contact the client support team if they have questions on the SBE protocol⁷.



⁷ See contact details in the <u>Support</u> section of this document

3. MIGRATION PLAN



3.1. MIGRATION PLAN OVERVIEW

The migration of Borsa Italiana to Optiq in Production will be conducted over **three (3) Go- Live weekends**:

- (1) first weekend for Cash Equities and ETFs, ETCs, ETNs
- (2) second weekend for Warrants & Certificates, Fixed Income and EuroTLX
- (3) third weekend for Financial Derivatives and Energy Commodities.

	Phase 1:	Phase 2:	Phase 3:
	Equities and Funds	Warrants & Certificates, Fixed Income and EuroTLX	Financial Derivatives and Energy Commodities
Go-Live Dates	27 March 2023 (confirmed)	11 September 2023 (confirmed)	25 March 2024 (confirmed)

Functional changes on Euronext systems will be released in the test environment (Next EUA) in order to enable customers to validate their software prior to Go-Live. Details on the test and production environments can be found in later sections.

Prior to the Go-Live date of each phase of the migration, a number of technical and functional tests (incl. connectivity, high availability and front-to-back) and Dress Rehearsals will be held to ensure a smooth migration.

Italian instruments and Derivatives contracts are listed in the EUA and Production environments on Optiq prior to the Go-Live dates.

Italian instruments impacted by the Phase 2 of the migration of Italian markets to Optiq and tradable on the below markets have started to be made available for testing on the Warrants & Certificates and Fixed Income segments of Optiq Next EUA environment:

Optiq segment	Regulated Market	MTF
Warrants & Certificates	SeDeX	EuroTLX Cert-X
Fixed Income	MOT	ExtraMOT, EuroTLX Bond-X
Equities	-	EuroTLX Equities

Please refer to the lists of <u>Next EUA Client Test Instruments</u> and <u>Instrument Group</u> Codes.

Clients are informed that the mnemonic codes on instruments may change. The list of mnemonic codes that will come into force with the Phase 2 of the migration will be published in due course.

General notes:



- Upgrades for clients trading on legacy Euronext markets have started and will be phased in up until the end of each phase of the migration
- Clients should note that in parallel to the Borsa Italiana migration to Optig, there will also be changes on legacy Euronext markets that are not related to the migration itself. These may require additional developments from clients, in parallel to the migration.
- The Borsa Italiana migration onto Optig and related changes are subject to regulatory approval.

Notes on Clearing:

- Please note that in parallel to the Optiq migration, Euronext Clearing will become the default CCP on Euronext Amsterdam, Brussels, Dublin, Lisbon and Paris cash equity markets from October 2023.
- The products in scope of these markets are Euronext equities (central order book and TCS), ETFs, Amsterdam open-ended funds, cash bonds, cleared warrants, and Euronext ISINs on Euronext Block.
- The products out of scope are non-Euronext ISINs on Euronext Block, non-cleared warrants, and the delta neutral cash leg which will continue to be cleared by LCH SA until the migration of derivatives clearing to Euronext Clearing. Norwegian and Italian cash equity products are not impacted by this change.
- No functional nor technical changes are expected from a trading perspective. Clients will, however, be asked to conduct front-to-back tests with their Clearing Members in due time, and to verify that their Clearing Members have signed the contractual agreements with Euronext Clearing prior to go-live.
- Dedicated communication will be issued to trading clients shortly. In the meantime, clients can reach out to ccp-readiness@euronext.com and ccpsales@euronext.com.

3.2. KEY MILESTONES IN THE MIGRATION

See below the key milestones in the migration of Borsa Italiana markets to Optiq.

Phase 2:

	Start	Deadlines for completion
Connectivity / Colocation set-up ready ⁸	March 2023	June 2023
Next EUA for trading functional testing	Mid-April 2023	N/A
Next EUA for clearing and settlement specific features	Mid-May 23	N/A
Conformance Test	May 2023	End of June 2023

⁸ for Borsa Italiana clients in colocation or not yet connected to Optiq or partially connected or wishing to change their current set-up – more details in the chapter below



3. MIGRATION PLAN

Front to-Back Test	May 2023	End of June 2023
External Dress Rehearsal 1	8 July 2023	N/A
External Dress Rehearsal 2	22 July 2023	N/A
Go-Live	11 September 2023	N/A

3.3. CONTINGENCY PLAN

The schedule includes a contingency plan as an emergency measure that would be activated only in the unlikely event that not all testing criteria are fully validated and the Go-Live is at risk.

Clients are invited to make note of the back-up dates.

Phase 2:

	Date
Contingency External Dress Rehearsal	16 September 2023
Contingency Go-Live	25 September 2023





The Italian markets will move to the Euronext Optiq® Trading and Market Data System, used by all legacy the Euronext clients to trade on and receive market data from Euronext cash and derivatives markets.

We encourage clients to refer to the Data Centre Service Description Brochure.

Client of legacy Euronext markets

No changes will take place on TCP/IP session at Order Entry (OEG) level. Clients already connected to Optiq will be allowed to leverage their existing connectivity for both EUA and production accesses.

Nevertheless, clients are requested to:

- Review bandwidth usage on their existing infrastructure(s)
- Subscribe to the new Market Data channels for Italian Markets
- Assess whether extra capacity is required for Order Entry / Drop Copy

As Market Data for Italian markets will be disseminated via dedicated channels, Borsa Italiana clients will be asked to:

- Specify to Euronext the new channels they will need to receive by filling in the Order Form accordingly, in order to complete the enablement (for both EUA and Production for Member Firms and Market Data Clients, or for EUA only for ISVs)
- for clients connecting via a Service Provider, liaise with the Service Provider to have the relevant channels provisioned
- Listen to the multicast groups corresponding to the above specified channels

Clients of Italian markets only

For clients of Italian markets only, a distinction needs to be made between clients that currently access Borsa Italiana via colocation in Milan and clients connecting via other available connectivity options.

For connectivity to EUA, clients not yet connected to Optiq will be permitted to connect to Optiq EUA using the connection (EMC, CMC, accredited SP, VPN) currently used to access the legacy Borsa Italiana test environment (also known as CDS).

Clients should liaise with optiqmigration@euronext.com to provide the details of the connection(s) the client plans to use to access Optiq EUA and to have access enabled.

4.1. CLIENTS CURRENTLY CONNECTING TO THE ITALIAN MARKETS VIA COLOCATION

Clients that are currently in colocation in the Milan Primary Data Centre to trade on Italian markets will either have to set up a new colocation footprint in the Euronext Aruba IT3 Data Centre (where Optiq is located and where the Optiq colocation hall is available for clients), or, if they already anticipated the impact of the migration of Borsa Italiana when setting up their infrastructure in the new Euronext Data Centre, they can use their existing



colocation footprint. Alternatively, if they are not interested in setting up a colocation footprint in the Euronext Aruba IT3 Data Centre, they can opt for other connectivity solutions).

To set up a new colocation footpring in the Euronext Aruba IT3 Data Centre, clients are requested to follow the steps below:

- Complete the colocation Order Form specifying all requirements i.e. number of cabinets and related power, number and types of cross-connects, time services, connection to the Exchange (FTEx)
- Review and sign the associated General and Specific Terms & Conditions and Order Forms
- Order their equipment (Racks, servers, ...) and carriers to connect to the Data Centre. <u>Due</u>
 <u>to current delays in receiving their equipment, clients are invited to order</u>
 <u>equipment as soon as possible.</u>
- Ship equipment and agree on installation timeline (or request Smart Hands Service for the installation)
- Perform their connectivity tests.

Alternatively, clients wishing to be in colocation via an Extranet Service Provider should liaise with their Provider as quickly as possible to ensure that connectivity tests are completed in due time.

Borsa Italiana clients already colocated in Aruba IT3 for legacy Euronext markets are encouraged to check whether their current infrastructure needs to be reviewed for the Borsa Italiana migration onto Optiq.

Clients of the relevant markets should have their colocation space ready and fully tested before the first Customer Dress Rehearsal of each Phase of the migration (e.g. clients of the Italian Equity and ETF markets should be ready by the first Dress Rehearsal of Phase 1, etc.) in order to complete the necessary testing ahead of each Go-Live.

New colocation clients wishing to build a colocation infrastructure for the Borsa Italiana migration should follow the same steps with the same timeline.

To support clients during the migration period, the following services will be available:

- Connectivity between the current Borsa Italiana colocation hall and the Optiq Next EUA and Production platforms (clients can choose between their current FTEx⁹ allowing them to connect to existing Borsa Italiana legacy platforms or new dedicated FTEx)
- Connectivity between the Aruba colocation hall and current Borsa Italiana legacy CDS and Production platforms (via dedicated FTEx, different to the connectivity used to connect to Optiq).

The table below provides the timeline for the steps related to colocation that clients need to take for Phases 1 and 2 of the migration.



⁹ Handoffs as per current terminology used by Borsa Italiana

Activity	Deadline Phase 2
Confirm set-up	April 2023
Order colocation equipment: order all the mandatory and optional equipment to set up cabinet(s), or to complete the existing set-up for clients already in Aruba colocation hall	April 2023
Sign contracts (order form)	Mid-May 2023
Send and install equipment to the new DC	Mid-May 2023
Complete configuration and tests	June 2023

4.2. CLIENTS CURRENTLY CONNECTING TO THE ITALIAN MARKETS VIA OTHER OPTIONS

Clients that currently connect to Italian markets via other connectivity options will be allowed to keep using their existing connection (EMC, CMC, accredited Service Provider) that they are using to connect to the current Borsa Italiana legacy platforms.

Depending on the Market Data option(s) they select, clients might be required to update their bandwidth requirements and as a consequence change their connectivity to the market. In terms of Market Data, clients' choices / requirements that may impact bandwidth usage are:

- Clients must choose between two different tailored Market Data models:
 - o MDG, the standard Optiq multicast feed
 - o MDG Lite, which is either
 - a TCP compressed feed built with the aim of reducing bandwidth requirements
 - a multicast feed providing the snapshot of the 10 best levels of book (order by order or aggregated by price)

Please note that the MDG Lite feed will only be available for the Italian markets

Technical documentation about MDG Lite can be found on the **Euronext Connect** customer portal.



 Regardless of the market data option chosen, clients will have to select the required MDG Market Data Packs (and bandwidth levels):

	For clients that select MDG	For clients that select MDG Lite Unicast
Bandwidth levels available	 100Mbps (data is always compressed) 1Gbps (data is shaped and for some channels might also be compressed) 10Gbps (data is unshaped – not available for all asset classes and markets) 	Bandwidth usage depends on the number of market data sessions (which correspond to TCP connections) used by the client
Market Data Packs:	 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) 	MDG Lite offers the same Market Data Packs as MDG in a TCP compressed format to reduce bandwidth requirements

Clients are requested to:

- Check their requirements in terms of the market data they need to receive (i.e., channels, which correspond to market/asset classes - and packs) for each asset class
- Check with their software vendors (and/or with their internal development team) the availability of the feed (MDG, MDG Lite, both) and packs selected
- Validate their bandwidth requirement (please contact us for any assistance you may need)
- Evaluate the potential upgrade of bandwidth of their connection
- Liaise with Euronext to manage any upgrades (if applicable).

Customers must ensure that they order the Milan Market Data Channels for **Production prior to the first Dress Rehearsal.**

Euronext can provide guidance to clients regarding their bandwidth requirements. Please contact optigmigration@euronext.com or your Sales Representative for further support.

More details can be found in the Guide to the Trading System available in the dedicated Optiq page on the Connect customer portal and on the Borsa Italiana website.

Clients that will be directly connected should follow the steps below:

Complete the CMC or EMC Order Form depending on the service chosen, specifying the number of circuits/ports and the related bandwidth



- Review and sign the associated General and Specific Terms & Conditions and Order
- Order their equipment (if needed) and circuits (if new CMC clients or CMC clients changing their set-up)
- Perform their connectivity tests.

Alternatively, clients wishing to be connected via Service Provider should liaise with their Provider as quickly as possible to ensure that connectivity tests are completed in due time.

The table below provides the timeline for the steps related to connectivity that clients need to take for Phases 1 and 2 of the migration.

Activity	Deadline Phase 2
Validate set-up	February 2023
Order additional equipment (if set-up changes)	March 2023
Sign contracts (order form)	Mid-May 2023
Deliver new links (if set-up changes)	May 2023
Complete configuration and tests	June 2023

4.3. TESTING ORDER ENTRY CONNECTIVITY TO PRODUCTION AND DISASTER RECOVERY **ENVIRONMENTS**

Clients of Italian markets

Telnet connectivity testing for Euronext Production and Disaster Recovery environments is already available.

Clients on the Italian markets not yet connected to Optiq are required to perform Telnet commands in order for Euronext to receive network validation of their connectivity. Telnet connectivity testing for the Euronext Production and Disaster Recovery environments is already available.

Please refer to the Euronext Cash and Derivatives Markets Optig OEG Service -**Connectivity Telnet Tests** document for more information.

Technical connectivity testing does not require any specific application set-up (i.e. Logical Access information) as it covers generic Telnet testing.

Clients of legacy Euronext markets

To listen to any new channel(s) and following the addition of partitions (as currently anticipated on some segments), clients currently on legacy Euronext markets will have to test their connectivity at the order entry and market data level by performing Logons and Telnet tests.



5. ACCESS MANAGEMENT



5.1. REGISTRATION & ACCESS TO THE EURONEXT CONNECT PORTAL AND COMPLETION OF ONBOARDING PACK

Current Borsa Italiana members are required to sign **new agreements to replace the current Borsa Italiana paperwork**. Regardless of their migration phase(s), each member has received an **Onboarding Pack** consisting of several legal documents to complete and return to the Exchange.

The onboarding pack also includes an explanatory note specifying the purpose of each document.

Note: more details on the content of the Onboarding Pack can be found in the contract management and legal documentation chapter.

In addition to the legal documents, Phase 1 members have been requested to provide some initial set-up details related to technical preferences and user registration for several applications such as, but not exclusively, Saturn (for regulatory reporting), MyEuronext, CFTS (for file transfers) and Connect.

Clients impacted by Phase 2 will be requested to provide an additional Initial Set-Up form confirming the relevant details for next phases.

	Italian clients not yet Connected to Optiq	Italian clients connected to Optiq trading on Italian markets	Clients connected to Optiq not trading on Italian markets
Initial set-up form	✓ [Mandatory]	✓ [Mandatory] for some tabs	×
CFTS form	✓ [Mandatory]	 [Mandatory] if clients do not have access to current file service system 	✓ If clients want to subscribe to SFTP service
Connect account creation	✓ [Mandatory]	✓ [Mandatory] If clients have not already created an account in Connect	×

Connect is the Euronext Customer Portal currently used to share information and documents with clients (including publications, IT documentation, etc.) and allowing clients to carry out a number of activities such as submitting membership requests, management of Logical Accesses, and others.

Clients of Italian markets

- Clients impacted by Phase 2 will be requested to submit a new Initial Set-Up form (even if they were already part of Phase 1) in order to collect the necessary data to set up Borsa Italiana clients in Optiq and its surrounding applications for Phase 2. Clients who are already connected to Optiq can also use MyEuronext to request their accesses.
- The information that must be provided by Borsa Italiana clients in the Initial Set-Up form includes the nomination of a Member Connectivity Administrator (MCA), equivalent to the 'ITCompany User' currently used within Borsa Italiana. MCAs are appointed by the Authorised Representative or Contract Representative who can manage the membership information through the dedicated portal (i.e. MyEuronext,



5. ACCESS MANAGEMENT

Connect, Member Portal), including but not limited to managing contacts, requesting Logical Accesses, managing the Euronext reporting services, depending on the profiles authorised.

Clients from the Italian markets are also invited to:

- Request access to CFTS, Euronext's new file transfer service, via MyEuronext
- Create a new account and subscribe to the Connect portal for at least one Authorised Representative (AR). Initial MCAs will be created by the Exchange according to the individuals registered via the "Initial Set-Up" form. The Authorised Representative will be able to amend the MCA directly in the Connect portal or MyEuronext going forward. Please refer to the dedicated section of this document for more information on the different roles.
- Acknowledge receipt of legal onboarding documents and launch related internal process.



Firm ID set-up for clients of Italian markets

Euronext uses a different set of member identifier codes (trading codes) to those currently used by Borsa Italiana to identify members on internal applications and systems. Members are therefore required to contact the Borsa Italiana Membership team in order to set up their new trading code, which will be assigned using the following approach:

- For members on Italian markets currently not connected to Optiq and using one single ID on Borsa Italiana, Euronext will issue one new Firm ID.
- For members on Italian markets already connected to Optiq and using one single ID
 on both Borsa Italiana and legacy Euronext markets, Euronext will configure their
 existing Euronext Firm ID so that it can also be used to trade on the Italian markets.
- Members who are currently using multiple IDs on either Borsa Italiana or legacy Euronext markets, members wishing to start using multiple IDs that do not already do so, and members for which Euronext would need to assign new Firm IDs in order to facilitate their full scope of business, should contact the Borsa Italiana Membership team in order to discuss their options.

The Firm ID set-up is a mandatory pre-requisite before starting any EUA testing.

Clients impacted by Phase 2 will be requested to submit a new Initial Set-up form in order to confirm the relevant details (including member capacities and Firm ID mapping) related to Phase 2.

Please note that, on Fixed Income, for MOT/ExtraMOT and EuroTLX markets, where members act as Liquidity Provider, a separate Firm ID and separate Logical Accesses will be necessary in order to segregate LP Activity. Therefore, the relevant members should submit dedicated Initial set-up forms for LP activity (in addition to the one submitted for non-LP activity). In case of any doubts, please contact Optiq Migration.



5.2. STEPS TO OBTAIN ACCESS TO THE NEXT EUA ENVIRONMENT

The table below describes the required steps and deadlines by phase (Phases 1 and 2) for **solely Borsa Italiana members** to have access to the EUA Test Environment, specifically the **Next EUA** Test Environment.

Access	Deadline Phase 2	Tool or form	
Logical Access			
Drop Copy	Mid-March 2023	Initial set-up form sent back by email to Optiqmigration@euronext.com	
Saturn	Miu-Maich 2023		
TCS (via OEG)			
Common File Transfer Service	March 2023	MyEuronext (accessed via Connect)	

As of Phase 2, current Borsa Italiana members with access to Optiq markets can manage their access through the MyEuronext portal for both legacy Euronext markets (EUA and PROD) and Borsa Italiana markets in EUA. However, those members do need to return the Initial set-up form for each phase of the migration with the first sheet "Member Capacities" completed.

Note that before they can order their Order Entry sessions via MyEuronext, users will need to be configured by the Market Access team and the relevant member company needs to sign the MyEuronext Terms & Conditions.

5.2.1. Ordering Logical Access (Order Entry Sessions) to connect to Next EUA

Clients of Italian markets, not yet connected to Optiq

Trading members and providers not currently connected to Optiq will be provided with Logical Accesses for the relevant Optiq segments on these Italian markets.

For that purpose, clients impacted by Phase 2 are also requested to **complete the "Initial Set-Up" form** and send it back to **Optiqmigration@euronext.com** by mid-March 2023.

Logical Accesses will be set with minimum throughput to allow clients to start their technical and functional tests. Logical Accesses are configured for Italian markets only, and based on the member's trading authorisations.

For more information about Logical Accesses, client may contact the dedicated Optiq support desk (see contact details in the **Contacts** section of this document).

Clients of Italian markets, already connected to Optiq

Trading members and providers who are already connected to Optiq **should already have Logical Accesses** to join Next EUA environment and are encouraged to **mutualise these as much as possible**.

For all clients connected to Optiq, for Phase 2, any addition or amendment of current Logical Access(es) in EUA should be managed via the Initial set-up form or via MyEuronext.



5.2.2. Ordering Drop Copy Logical Access for Next EUA

Drop Copy is a service providing near real-time copies of trade reports and, optionally, order messages, on Optiq. These sessions will be made available for Italian instruments via dedicated Drop Copy Gateways and FIX 5.0 Logical Accesses. A Drop Copy may be configured for all Optiq segments or at market segment level (Cash or Derivatives) by default.

Clients of Italian markets, not yet connected to Optiq

Drop Copy Logical Accesses should be requested through the dedicated "Initial Set-Up" form.

Clients of Italian markets, connected to Optiq

Any new (or additional) Drop Copy creation has to be requested by a registered MCA through the Connect portal via the dedicated forms below:

EUA Ordering Forms	
Optiq Cash Order Entry	Drop Copy creation - EUA
Optiq Derivatives Order Entry (Phase 3)	Drop Copy creation – EUA

More details can be found in the Euronext Markets - Optiq Drop Copy Service document. r

Clients can also request creation of Drop Copy Logical Accesses through new customer portal MyEuronext. Please note that Drop Copy modification and deletion requests are not yet available through MyEuronext and can still be handled via Connect.

5.2.3. Access to Saturn, the Euronext Reporting tool

Clients of Italian markets

Access to the Saturn application is mandatory for all trading members in order to manage their Short-Long Codes through the SLC Manager.

In order to obtain access to Saturn, members must:

- Sign the Euronext Regulatory Reporting Solution Access Registration Form (included in the Onboarding Pack and should be signed before requesting production accesses),
- Request user access for the relevant individuals via the Initial Set-Up form,
- Test connectivity to Saturn (see next chapter).

Euronext will be in contact with clients to request their preferred date for the move from UnaVista to Saturn for Regulatory Reporting functionalities.

More information is already available in the Saturn User Interface User guide

Clients of legacy Euronext markets

No specific action is required for clients who already have Saturn accesses set up.



5.2.4. TCS access set-up

Clients of Italian markets, not yet connected to Optiq (and TCS)

The Trade Confirmation System (TCS) can be accessed via Logical Access or via web application.

- Members who wish to use their Logical Access(es) to access TCS can indicate this when requesting Logical Accesses.
- Members who prefer to access TCS via web application should sign a separate TCS and Saturn Clearing Facility Agreement. Users can be added by one of the member's registered MCAs via the Connect portal (connect2.euronext.com/form/tcs-web-access-order-form).

More information is available in the TCS Web Access User Guide.

Clients of legacy Euronext markets

No specific action is required as TCS accesses are already set up.

5.3. STEPS TO GET ACCESS TO THE PRODUCTION ENVIRONMENT

The table below describes the required steps and deadlines by phase (Phases 1 and 2) for **solely Borsa Italiana members** to have access to Production.

Access	Deadline Phase 2	Tool or form
MyEuronext Terms & Conditions signature	March 23	N/A
Membership contracts signature	June 23	N/A
Logical Access		Initial set-up form sent back by email
Drop Copy		from the Authorised Representative/Contract Representative
TCS (via OEG)	June 23	to Optiqmigration@euronext.com Or MyEuronext for clients already connected to Optiq
Saturn	N/A as EUA credentials are valid for Production	
Common File Transfer Service	June 23	MyEuronext (accessed via Connect)

In addition, clients who wish to use RiskGuard need to request RiskGuard FIX Logical Access via the Initial set-up form for Borsa Italiana clients only and via Connect portal for others.

5.3.1. Ordering Logical Access (Order Entry Sessions) to access



Production

Clients of Italian markets, not yet connected to Optiq

Trading Members are required to order their Logical Accesses for Production at least two weeks before the start of the Dress Rehearsals.

After receiving a request for a Logical Access, the Market Access team will communicate log-in information to customer by email. Customers are required to have tested their connectivity in Production before the first mandatory Dress Rehearsal.

All Trading Members impacted by Phase 2 and who are connected to Borsa Italiana using Optiq are required to submit their Optiq[®] Cash and Derivatives OE Sessions requests starting from **April 2023**, and in any case **at the latest two weeks before a Dress Rehearsal**.

The Logical Access connectivity details will be made available a few days before the start of the Dress Rehearsals.

Please note:

- Application Service Providers (ASPs) do not have the ability to order OE Sessions on behalf of their clients
- Logical Accesses can only be ordered by a nominated Member Connectivity Administrator (MCA)

Any customer without an MCA account should contact the Market Access team for more information.

For any question, please contact the Market Access team (see Contact section of the document).

Clients impacted by **Phase 2** have to order and/or amend their Order Entry (OE) sessions in Production through the **same Initial set-up form as the one used for EUA**.

Clients of Italian markets, connected to Optiq

Trading Members who are already Euronext members should already have Logical Access IDs and will be able to leverage these. Nevertheless, they need to ensure that their current Logical Access IDs and related message outputs are up-to-date for managing Borsa Italiana activities.

5.3.2. Requesting Drop Copy access for the Production environment

Clients of Italian markets, not yet connected to Optiq

Clients are required to request Drop Copy Logical Access for production environment. Drop Copy OE sessions are available only in FIX format.

Drop Copy access (also if to be used by the Clearing member) for Production environment should be requested through the Initial Set-Up form.

Clients of legacy Euronext markets

No specific action is required as Drop Copy accesses are already set up.



5.3.3. Access to Saturn in the Production environment

Clients of Italian markets

User credentials created for the Test environment (EUA) on Saturn will also be valid for the Production environment. In other words, clients do not need to submit a separate request for users on the Saturn Production environment.

However, clients will need to activate their user for production environment separately. For any assistance, please contact our Market Access team.

Clients of legacy Euronext markets

No specific action is required as Saturn accesses are already set up.

5.3.4. TCS access set-up in the Production environment

Clients of Italian markets

Members who wish to use their Logical Access(es) to access TCS in Production can indicate this when requesting Logical Accesses for Production.

For clients accessing TCS via Web application, a registered MCA will need to submit a new request through the dedicated request form in the Connect portal (connect2.euronext.com/form/tcs-web-access-order-form) in order to obtain access to the

Production environment. EUA credentials will not apply on the Production environment.

Clients of legacy Euronext markets

No specific action is required as TCS web accesses are already set up.

5.4. CONNECTION SET-UP TO MYEURONEXT

All clients

Before being granted access to MyEuronext portal, all members are required to sign the MyEuronext Terms & Conditions and send them to BIt-Membership@euronext.com (this process will be managed directly via the portal when this function becomes available). No access to the portal will be granted to any client without the signature of the MyEuronext Terms & Conditions.

The MyEuronext portal will be accessed via Connect. Creation of a Connect account is therefore required prior to accessing MyEuronext.

All clients are encouraged to whitelist the MyEuronext site as soon as details are available, as this process can be lengthy in some companies.

As new portal services are delivered, Euronext provides user guides to support customers in carrying out their activities via the new service on MyEuronext. Information can be found in the <u>dedicated webpage on Connect</u>.

For clients of Italian markets, the MyEuronext Terms & Conditions are included in the Onboarding Pack.



5.5. RISKGUARD ACCESS IN NEXT EUA AND PRODUCTION

Clients of Italian markets

New clients wishing to access the RiskGuard service, Euronext's pre-trade risk management system, need to complete, sign and return to the Euronext Membership department:

- The Euronext Risk Management Service Agreement
- The relevant Statement(s) of Authority (for trading member, or trading member and clearing member depending on the set-up required)
- The MyEuronext Terms and Conditions (RiskGuard will be available on MyEuronext for Derivatives markets only)
- The Sponsored Access Application form (for Cash markets only)

In addition, clients wishing to connect to RiskGuard through the FIX API (the only method available for Cash markets) should request dedicated RiskGuard Logical Access(es) (via the Initial Set-Up form). RiskGuard Logical Accesses use the FIX protocol only.

Once the legal documentation is signed, for clients wishing to use the RiskGuard User Interface on Derivatives markets only, a registered MCA will be able to configure the relevant users as RiskGuard Agents (RAs) in the Connect portal. As soon as a user has been assigned the RA role in Connect, they will be able to access the RiskGuard service in MyEuronext. More information about the availability of the RiskGuard User Interface for Cash markets will be communicated in due course.

Clients of legacy Euronext markets

For existing clients of the RiskGuard service on Euronext Derivatives markets that wish to extend to the Cash markets, no Risk Management Service Agreement will have to be signed. They will have to submit their request for a dedicated RiskGuard Logical Access via Connect.



6. TESTING IN NEXT EUA



The main testing phase for the Borsa Italiana migration onto Optiq will take place on the Next EUA environment (previously called P-EUA).

The different tests required for the migration(s) are as follows:

Type of Test	Clients of Italian markets	Clients of legacy Euronext markets	Webform mandatory to confirm success of the test
Functional tests in Next EUA	√ [Mandatory]	✓ [Mandatory] only for new supported features on legacy markets (done as those features are delivered)	N/A done with an analyst or √ via dedicated form depending on feature delivered for clients on legacy markets
Conformance test in Next EUA	√ [Mandatory]	√ [Mandatory] only for new supported features on legacy markets (done as those features are delivered)	N/A done with an analyst
High Availability test in Next EUA	√ [Mandatory]	√ [Highly recommended]	√
Market Data Gateway (MDG)	√ [Mandatory]	√ [Mandatory] if subscription to new Italian channels	✓
Throttling	√ [Highly recommended]	× [Optional]	√ ¹⁰
Front-to-Back	√ [Mandatory]	√ [Highly recommended]	✓
TCS via OEG	× [Optional]	× [Optional]	N/A done with an analyst
Saturn Reporting & SLC	√ [Mandatory]	× [Optional]	✓

¹⁰ Will be available in due course

6.1. PLATFORM AVAILABILITY

6.1.1. Next EUA availability

For both Cash and Derivatives markets, the Next EUA platform will be available to test OEG and MDG Optiq[®] applications on **all working days, except Wednesday morning until 14:00 CET/CEST** when the platform is closed for routine maintenance.

The Next EUA test environment will be made available to clients for testing of all new features for end-to-end testing of Optiq and for the conformance test as part of Borsa Italiana migration.

Testing Platform availability:

Cash Next EUA platform	Week days between 09:00 and 22:00 CET
Derivatives Next EUA platform	Week days between 09:00 and 22:30 CET

As a reminder, the Optiq Next EUA (P-EUA) and Current EUA (V-EUA) environments are now located in Bergamo, Italy.

For **Phase 2**, a subset of Italian instruments has been available in Next EUA since **19 April 20223**, for the following markets:

- SeDeX
- MOT
- ExtraMOT
- EuroTLX Cert-X
- EuroTLX Bond-X
- EuroTLX Equities

Optiq segment	Regulated Market	MTF
Warrants & Certificates	SeDeX	EuroTLX Cert-X
Fixed Income	MOT	ExtraMOT, EuroTLX Bond-X
Equities	-	EuroTLX Equities

On Fixed Income, at least one instrument per Trading Group has been provided. On W&C at least one instrument per LP has been provided. Since the initial opening of the test environment, new instruments have been progressively added. The updated list of instruments testable by clients (and their eligibility for F2B testing) is available in an Excel file entitled "Phase 2 Next EUA Instruments" on Connect and on Borsa Italiana websites.

6.1.2. Saturn testing availability

The Saturn application is available for testing by all clients in the Next EUA platform. Clients interested in services such as OBOE, Commodity Position Reporting or OTC Trades must perform testing on Saturn. Saturn is also the application that hosts the SLC Manager.

Saturn Next EUA is available on all working days, except Wednesday morning until 14:00 CET /CEST.

6.1.3. High Availability testing availability

The timetables for High Availability testing in Cash and Derivatives Next EUA (P-EUA) environments are as follows:

Day of the week	Partition ID	Segment	Time CET/CEST
	11	Equities	11:00
Monday	140	Block	11:00
Monday	20	ETFs	15:00
	30	FXI	15:30
	40	Warrants	11:00
Tuesday	10	Equities	15:30
	11	Equities	16:30
	110	Index Derivatives	11:00
Thursday	80	Commodity Derivatives	15:30
	41	Warrants	16:30
	120	Equity Derivatives	11:00
Friday	12	Equities	15:30
	13	Equities	16:30

6.2. CCP TESTING PLATFORM AVAILABILITY

Clients of Italian markets

The current post-trade set-up and relationships of trading members with their clearing members and settlement agents, their links with the CCP, i.e. Euronext Clearing, and with Euronext Securities Milan will be maintained in Euronext systems for testing purposes, unless trading members request Euronext to apply specific membership changes as a target for the

Please remember that the use of the Comp ID has been replaced by the Firm ID for Cash markets.

In order to ensure a successful migration, end-to-end tests from trading to clearing are mandatory for trading participants. Their clearing members and settlement agents are requested to ensure no regression and client readiness prior to the Go-Live of every phase.

For Phase 2, Next EUA opened for post-trade parties (both clearing and settlement) on 18 May 2023.

As communicated by Euronext Clearing and Euronext Securities Milan to their clients, the scope of post trade testing is limited to non-regression. There are no system nor technical impact on post trade clients in relation to the migration.

Therefore, settlement agents and clearing members are requested to report on the outcome of their testing in a dedicated questionnaire.

The sales and relationship managers of Euronext, Euronext Clearing, EuroCCP, LCH Ltd and Euronext Securities Milan will monitor specifically the readiness of their own clients as per their area of expertise.

For any further information about the migration with the current CCPs Euronext Clearing/ EuroCCP/LCH Ltd and the CSD Euronext Securities Milan, please visit their websites or contact your CCP/CSD relationship managers:

- Euronext Clearing
- Euronext Securities Milan
- EuroCCP
- LCH Ltd

6.3. FUNCTIONAL TESTS

6.3.1. Testing of new functionalities in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	√ [Mandatory] only for new supported features on legacy markets (done as those features are delivered)

Clients of Italian markets

Clients have to perform all relevant testing (Functional Testing, High Availability) in Next EUA, including:

- Conformance Tests (full, partial or light conformance or a self-certification, depending on client's set-up please refer to section 6.3.8)
- Front-to-Back testing (as detailed in the following section of this document)

All relevant testing must be completed before the beginning of the Dress Rehearsals in order to be ready to test the new platform in production.

For **Phase 2**, the Next EUA test platform for Borsa Italiana clients has been open since 19 April 2023.

Clients of legacy Euronext markets

The Next EUA environment is being upgraded gradually to incorporate the required Borsa Italiana-specific changes and related implementation of new SBE templates.

Changes impacting legacy Euronext markets as a result of the migration of Borsa Italiana onto Optiq will be made in various batches over the months until the last date of the migration, in line with Euronext's delivery process.

Next EUA upgrades are always communicated in advance through Operational Notices/Info-Flashes. Clients are requested to perform testing at the time of the implementation of the releases. Details regarding the tests expected from clients are included as part of the communication.

For more details see the dedicated section of this document.

6.3.2. High Availability testing in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	√ [Highly recommended]

High Availability (HA) testing is mandatory for all new customers.

The High Availability order entry test contains different scenarios, some being "single-partition" and some "multi-partition". Multi-partition High Availability testing is mandatory for trading members and providers who are trading Equities, Warrants (Cash market), ETF/Funds¹¹ (Cash market) or Equity Derivatives (Derivatives market). These segments have multiple partitions, thus multi-partition HA is crucial.

High Availability testing is part of the Conformance certificate (Order Entry Functional Conformance + HA). A trading member/provider will only receive its conformance certificate once HA testing has been completed. A client is considered to be "certified" only by receiving the certificate.

Validation forms must be submitted by clients after the test: High Availability conformance.

6.3.3. Saturn testing in Next EUA¹²

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	× [Optional]

Euronext expects clients not yet connected to Saturn to perform a full test of all the Saturn services requested and confirm a positive result via webform.

Clients already connected to Saturn are also invited to perform this test.

It is also mandatory for clients to test whether they are able to upload their short-long codes into the system correctly.

Saturn SLC clients will be requested to perform a File upload and insertion of an SLC file and confirm a positive result via webform. Saturn SLC is mandatory for both Cash (including Fixed Income) and Derivatives.

Validation forms must be submitted by clients after the test: Saturn validation form.

Note: clients of the Italian markets wishing to continue using the existing Borsa Italiana Regulatory Reporting solution (Una Vista) until decommissioning in Phase 3 must also ensure they have tested the system properly.

¹¹ It is currently foreseen that a second partition will be added to the ETFs / Funds segment

¹² The current Borsa Italiana Record Keeping service will be discontinued following the migration to Optiq. It will be replaced by the existing Euronext Saturn solution, called SLC Manager.

6.3.4. Drop Copy testing in Next EUA

Although no conformance test on Drop Copy is required, clients of Italian markets are strongly encouraged to perform full testing of the service on their side.

6.3.5. Throttling testing in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
√ [Highly recommended]	× [Optional]

Throttling testing is **highly recommended for new clients to ensure they understand** and can handle the Throttling mechanism on Optiq.

Clients can follow the Throttling conformance script and submit a <u>webform</u> confirming their test completion. This is relevant for Cash (including Fixed Income) and Derivatives markets.

These tests follow the Throttling mechanism that is described in the "OEG Throttling" section of the Optiq OEG Connectivity Features & Configuration Specifications document.

6.3.6. Market Data Gateway (MDG) testing in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	\checkmark [Mandatory] if subscription to new Italian channels ¹³

A Market Data Gateway (MDG) test is mandatory for all clients (Trading Participants and Market Data Clients) subscribing to new market data channels that will be made available for Italian markets in the context of this migration.

Clients receiving market data through software providers only are not required to submit the validation form as this will be managed by their software vendors.

The MDG Check List form aims to validate that the member/provider can receive and manage all MDG messages and understands the underlying concepts related to Market Data.

Please see Euronext Markets - Optiq MDG Client Specifications and Euronext Optiq[®] Market Data Gateway Production Environment documents for details on how Market Data works on Optiq. Please also see the Euronext Derivatives Markets - Optiq Kinematics Specifications and Euronext Cash Markets - Optiq Kinematics Specifications.

Validation forms must be submitted by clients after testing:

- MDG and MDG Lite Multicast check list
- MDG Unicast check list

¹³ May be made mandatory – to be confirmed in due course

6.3.7. TCS testing (GUI and OEG)

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	× [Optional]

All new Clients trading via TCS-OEG for Blocks/Bilateral Negotiated Trades are expected to perform TCS conformance tests. Clients trading via TCS GUI will not have to go through conformance tests but should perform a validation on their side and confirm this to Euronext via a webform. Details of the form will be communicated in due course.

6.3.8. Conformance testing in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
√ [Mandatory]	√ [Mandatory] only for new supported features on legacy markets (done as those features are delivered)

Clients of Italian markets

The following members and providers are required to perform a mandatory OEG full conformance test:

- New trading members accessing the Euronext Optiq® platform directly who are not yet certified on the Optiq platform
- Trading members using an in-house software which is already certified on the Optiq platform but is subject to a new release
- Software providers not yet certified on the Optiq platform

Notes:

- A full conformance test is also required for SeDeX and Cert-X Member Firms and ISVs who are not certified/connected yet to the Optiq Warrants & Certificates segment and who develop a proprietary software
- A light conformance test is required for SeDeX and Cert-X member firms who are not yet certified/connected to the Optiq Warrants & Certificates segment and who use a third-party software

The below table describes the types of conformance test applicable for the different types of members and providers:

Trading Member	s			
Already connected to Optiq	Using in-house software	Developing new features	Subject to new release*	Full conformance
			Not subject to new release*	Partial conformance
		Not developing new features		Self-certification
	Using third-party software			Self-certification
Not yet connected	Using in-house software			Full conformance
to Optiq	Using third-party software			Light conformance
ISVs and ASPs				
Already connected to Optiq		Developing new features	Subject to new release*	Full conformance
			Not subject to new release*	Partial conformance
		Not developing new features		Self-certification
Not yet connected t	o Optiq			Full conformance
Data Vendors				
All				N/A (MDG test only)

^{*}New release: change of protocol or general major software release

These tests are described in the table below:

	Full Conformance	Partial Conformance	Light Conformance	Self- certification
Approach	Partially autonomously and a Euronext and Please book your conform webform	alyst. rmance via the	Live with a Euronext analyst for validation only (tests are done autonomously) Please book your conformance via the webform	Offline, autonomously
Scope	Execute for all member codes and all solutions a set of tests to confirm the Optiq protocol is correctly implemented and compliant with Euronext guidelines. Clients select the OEG features to certify during test.	and/or features	of functional messages that are developed by ne client	Limited number of functional messages

After booking your conformance test, please complete the Optiq Certification Test Report v2 Report and return it before your conformance test by email to: optigmigration@euronext.com.

Please note that:

- Clients will not be able to access the Production environment either during the Dress Rehearsal or for Go-Live unless they have completed their conformance tests.
- Conformance tests are required on both Cash and Derivative markets. A client active on both Cash and Derivatives markets would need to perform a conformance test for each market at the appropriate timing (respectively Phases 1 and 3). The same applies for the other conformance tests (so two High Availability tests, two MDG Gateway validations, etc).

- Full <u>backward / forward compatibility</u> tests will be mandatory for clients when performing their conformance tests.

Full, partial and light conformance test must be booked in advance using the **Conformance Booking Form**. The following scripts will be used: **Functional Conformance Test Script**.

Clients who do not have to do a full, partial or light conformance, still need to confirm their readiness using the <u>Self-certification webform</u>.

More details on scope, scripts and guidelines for Conformance tests will be shared with clients in due course. Scenarios will be adjusted according to the changes related to the migration of Borsa Italiana markets onto Optiq.

Clients of legacy Euronext markets

Legacy Euronext customers will have to perform conformance tests at the time of project deliveries, as it is the case currently. Details of conformance tests and requirements are communicated via Operational Notice before every delivery.

Trading members and third-party software vendors already certified on the Optiq® platform are only required to perform an OEG light conformance test.

6.3.9. Front-to-Back testing in Next EUA

Clients of Italian markets	Clients of legacy Euronext markets
✓ [Mandatory]	√ [Highly recommended]

The migration to Optiq requires **mandatory** testing between Trading Members and their Clearing Members and Settlement Agents. The purpose of the test is to ensure that clearing information entered at order entry level is correctly received and processed allowing proper reconciliation, processing of clearing instructions and settlement. **As a result, Front-to-Back testing is mandatory in the context of the Borsa Italiana migration to Optiq for both Cash and Derivatives markets.**

Member Developer	Member Developer also using a provider	Market Makers using a provider only	Trading Member using a provider only	Provider
Mandatory	Mandatory	Mandatory	Mandatory	Mandatory ¹⁴

¹⁴¹⁴ As a reminder, no conformance tests will take place on Wednesday mornings as the Next EUA platform is closed for routine maintenance until 13:00 CET/CEST

When performing the Front-to-Back conformance test, the Trading Member is responsible for confirming with its Clearing Member(s) and Settlement Agent(s) that the trades were reconciled as expected.

The test must be completed by each individual trading firm, identified by a Firm ID (a.k.a. Member Code / TMF) to ensure its account and configuration set-up is correct.

Note that Borsa Italiana clients who are already connected to Optiq must use the TUI as a reconciliation key for Italian markets and the execution ID for other Euronext markets.

These tests will allow Euronext to confirm that the mapping of fields and the associated configured values from order entry to trade allocation in clearing and settlement interfaces is correctly populated by the clients' trading facing systems, Clearing Members and Settlement Agents. Before performing testing, clients are strongly encouraged to ensure that their systems use the correct mapping of values and instructions for clearing and settlement data.

Validation forms must be submitted by clients after testing: Front-to-back test validation.

For Phase 2, the testing window for end-to-end testing has opened and will close on 7 July 2023 (before the first Customer Dress Rehearsal).

Should customers' teams need to test on both Millennium and Optiq Cash at the same time, please note that trades executed on the same instruments on the same day and sent for clearing and settlement will be netted against each other if they are allocated to the same clearing / settlement accounts. In order to avoid such testing interference, Euronext recommends that customers segregate and use different instruments in their testing scenarios between Optiq and Millennium so as not to invalidate their expected outcome in the settlement process and reconciliations.

6.4. TEST SCENARIOS AND WEBFORMS

Test scripts can be found in the Euronext Connect customer portal:

Cash Conformance Test

The table below provides the links to the webforms for each of the tests clients need to complete.

Test	Webform
Conformance test in Next EUA	<u>Booking form</u> for full, partial or light <u>Self-certification</u>
High Availability test in Next EUA	High Availability Conformance
Market Data Gateway (MDG) Multicast	MDG and MDG Lite Multicast check list
Market Data Gateway (MDG) Unicast	MDG Unicast check list
Throttling	Throttling validation
Front-to-Back	Front-to-back validation
Saturn Reporting & SLC	Saturn validation

MANAGEMENT, LEGAL DOCUMENTS AND PROFILE TYPES

7.1. CONTRACTUAL MANAGEMENT AND LEGAL DOCUMENTS

The documentation that facilitates the use of all Euronext's services by clients must be executed in line with Euronext guidance. No client will be allowed to connect to the Production environment without having completed the legal onboarding process.

The tables below summarise the timing for the completion and signature of forms and contracts, and details of to whom they should be returned, for Phases 1 and 2.

Form

Forms – EUA and Production	Deadline Phase 2	To be sent back to:
Initial Set-Up form	Mid-March 23	Optiqmigration@euronext.com

Contracts:

Contracts	Deadline Phase 2	To be sent back to:	
Borsa Italiana Membership Application Form and Annex	June 23		
Trading Platform Access Agreement (TPAA) order form		BIt-Membership@euronext.com	
Regulatory Reporting Solution Access Registration form		<u> </u>	
MyEuronext Terms & Conditions	March 23		
EMDA Agreements & order form	1 April 23	<u>Databyeuronext@euronext.com</u>	
Service Provider Agreement (SPA) for ISVs	March 23 (before connection		
Service Provider Agreement (SPA) for ASPs	to EUA)	<u>Optiqmigration@euronext.com</u>	
Service Provider Accreditation Agreement (SPAA)	June 23	BIt-Membership@euronext.com	

Contracts for optional services	Deadline Phase 2	To be sent back to:
TCS and Saturn Clearing Facility Agreement (for TCS GUI)	lune 23	BIt-Membership@euronext.com
Market Maker and Liquidity Provider Application Form	Julie 23	Market Development Lead or Sales Representative

Connectivity and Colocation packs:

Connectivity and colocation	Deadline Phase 2	To be sent back to:
Colocation Agreements & related forms		
Connectivity Agreements & related forms	Mid-May 23	Optiqmigration@euronext.com

7.1.1. Membership

New interim membership documentation ("Membership Documents") has been created for Borsa Italiana customers only.

This interim Membership Documentation will allow current members of Borsa Italiana to continue to conduct their trading activities on the Borsa Italiana markets once these markets have been migrated onto Optiq.

These interim Membership Documents include, inter alia: a new Membership Application Form specific to Borsa Italiana members. The table below indicates which contracts must be signed by each type of client. Clients who already executed those documents in Phase 1 of the migration do not have to sign them again.

	Not yet connected to Optiq	Connected to Optiq but not impacted by Phase 1		
Borsa Italiana Trading Memb	pers			
Membership Application Form	✓	✓		
Regulatory Reporting Solution Registration Form	✓	x ¹5		
Borsa Italiana Application Service Providers (ASPs), Extranet Service Providers (ESPs)				
Service Provider Agreement (SPA) for ASPs	✓	×		
Service Provider Accreditation Agreement (SPAA)	√ 16	√ 17		
Borsa Italiana Software Vendors (ISV)				
Service Provider Agreement (SPA) for ISVs	✓	×		

- The Membership documents were issued early March to all Borsa Italiana members impacted by Phase 2 and are accompanied by explanatory notes, to confirm and clarify the contractual position for the new Borsa Italiana signatories
- Existing Euronext-only members will continue to operate under their existing
 membership terms for Euronext markets. A new Application form for new members as
 well as for extending trading access between Euronext and Borsa Italiana markets will
 be made available to be used after the migration. Changes to the TPAA (extending its
 scope to Borsa Italiana markets) have been notified to all registered Authorised
 Representatives.

7.1.2. Access to and use of Optiq®

Borsa Italiana clients not yet connected to Optiq who have not yet signed the Euronext Trading Platform Access Agreement ("TPAA") have been sent a copy of the TPAA and its accompanying Order Form, which they need to execute to access and use the Optiq platform.

¹⁵ Unless clients wish to move their trade reporting solution to Saturn

¹⁶ For providers in direct connectivity

¹⁷ For providers in direct connectivity

7. CONTRACT MANAGEMENT, LEGAL DOCUMENTS AND PROFILE TYPES

The table below indicates which clients must sign the TPAA.

	Not yet connected to Optiq	Connected to Optiq
Trading Members		
Trading Platform Access Agreement ("TPAA")	✓	×

7.1.3. Data Centre access, use and connectivity

The standard Euronext Data Centre Services Terms and Conditions that govern access to and use of (i) the Bergamo Data Centre (available on the Euronext website) and (ii) the Optiq platform by existing Borsa Italiana Application Service Providers, Extranet Service Providers, Independent Software Vendors and Data Vendors have been issued to clients and will need to be executed before each relevant Phase of the migration.

To arrange access and use of Data Centre services and the set-up of market data channels, Borsa Italiana clients will need to execute an Order Form(s) for colocation and/or connectivity. For existing Data Centre clients, a simplified Order Form is available.

The table below indicates which clients need to return and sign the Colocation and Connectivity order forms.

	Not yet Connected to Optiq	Connected to Optiq	
Borsa Italiana Trading Mo	embers		
Colocation direct	✓	√ 1	
Colocation indirect	×	×	
Connectivity direct*	✓	√ 1	
Connectivity indirect	×	×	
Borsa Italiana Application	n Service Providers (ASPs), Extrane	et Service Providers (ESPs)	
Colocation direct	✓	√ 1	
Colocation indirect	N/A – not allowed	N/A – not allowed	
Connectivity direct*	✓	√ 1	
Connectivity indirect	✓2	✓2	
Borsa Italiana Data Vend	ors		
Colocation direct	✓	√ 1	
Colocation indirect	N/A (tbc)	N/A (tbc)	
Connectivity direct*	✓	√ 1	
Connectivity indirect	√ 1	√ 1	

 $[\]checkmark$ 1 Mandatory for clients connecting to Italian markets

Note that Euronext Data Vendors, ASPs, ESPs not yet active on Italian markets are not impacted by this section.

7.2. ORDERING MARKET DATA

The table below indicates which types of client need to sign the EMDA Agreements and order form.

 $[\]checkmark$ 2 For ASPs connecting to Italian markets behind service provider only for non-physical connectivity purposes

7. CONTRACT MANAGEMENT, LEGAL DOCUMENTS AND PROFILE TYPES

	Borsa Italiana clients not yet Connected to Optiq	Borsa Italiana clients connected to Optiq and trading on Italian markets	Euronext clients connected to Optiq not trading on Italian markets
Trading Members	✓	✓	√*
Providers	✓	✓	✓*

^{*} Applicable to clients who sign up for new market data

Clients of Italian markets

Clients of Italian markets (including Trading Members) that would like Market Data, either connected directly or via an Extranet Service Provider (ESP), Application Service Provider (ASP) or data vendor, must sign the Euronext Market Data Agreement (EMDA).

Clients of legacy Euronext markets

Clients (including Trading Members) that already have Euronext market data and would like to receive Borsa Italiana market data will need to update their existing EMDA order form.

The documentation for the Euronext Market Data Agreement can be found on the Euronext Connect customer portal: Market Data agreements.

8. GO-LIVE

8.1. EXTERNAL DRESS REHEARSAL

Two mandatory Dress Rehearsals will take place before every Go-Live on Saturdays, allowing all customers to perform full testing in the Production environment. Customers will not be authorised to take part in the Dress Rehearsal weekend unless they have:

- validated their conformance test
- confirmed Telnet connectivity to Production
- ordered their OE Sessions for Production
- signed all appropriate legal documents.

More details on the scope and the programme of the Dress Rehearsal days will be shared in due course.

8.2. ROLL-BACK PLAN

Details of the Roll-Back procedure will be provided two weeks before the first Dress Rehearsal. Clients must ensure the necessary resources are made available over the Go-Live weekend to support the Roll-Back scenario, if activated.

If the Roll-Back plan is activated, an Info-Flash will be sent to all Euronext Clients. Clients can subscribe to receive Info-Flashes and review past Info-Flashes via the <u>Euronext Customer</u> Connect Portal.

8.3. FREEZE PERIOD

Euronext will apply a freeze period to the management of trading membership, clearing and settlement membership changes before and after the migration to Euronext systems in order to ensure business continuity and stability during the migration.

8.3.1. Trading Member Firms

- Prior to and after the Go-Live weekend, there will be a freeze period on the activation of new members on the Borsa Italiana markets and any market extension on Borsa Italiana markets for existing Borsa Italiana members impacted by Phase 2.
 - During this period of time, applicants are welcome to apply and start the admission process in order to be able to activate their membership after the Borsa Italiana migration has been completed.
- Market extensions on other legacy Euronext markets for existing Euronext members will only be frozen for a very short period of time during the Borsa Italiana migration.

The table below provides details of the membership freeze related to the Phase 2 of Borsa Italiana migration.

Trading members	Freeze pre Go-Live	Freeze post Go-Live
Legacy Euronext markets: Extension to other Euronext legacy locations or markets	as of 4 September 2023	until 18 September 2023



Borsa Italiana markets of Phase 2: Extension to other Italian markets	as of 7 July 2023 (1 st CDR)	until 11 October 2023
Borsa Italiana markets of Phase 2 : New membership	as of 7 July 2023 (1 st CDR)	until 11 October 2023
Legacy Euronext markets: New membership	as of 4 September 2023	until 18 September 2023
Borsa Italiana markets of Phase 2: Change of Set-up	as of 28 August 2023	until 18 September 2023
Legacy Euronext markets: Change of set-up	Thursday and Friday before Go-Live	Tuesday after Go-Live

Information on the freeze period for Clearing Member Firms as well as freeze period related to the Euronext's Clearing Migration Programme will be shared in due course.



9. KEY OPERATIONAL DOCUMENTATION



9.1. EXTERNAL SPECIFICATIONS

Clients of Italian markets

Clients are encouraged to start their development as soon as possible based on the technical documentation available on the **Euronext IT Documentation page** of the Connect customer portal. Euronext communicates new specification with each release. Specifications with related adjustments on functional changes will be made available, according to market practices, ahead of the upgrade of the external testing environment.

Clients of legacy Euronext markets

Every technical or functional change that impacts clients will be reflected in a new external specification version. Specification versions are associated with an SBE Version number that provides clients with the minimum SBE version required for the new functionality.

External specifications will be updated along with project delivery and communicated through Operational Notices or Info-Flashes informing clients about the nature of the changes and the expected tests required from clients.

The following batches of external specifications have been issued:

	Date of issuance	Delivery time period	Phase
Batch 7	14 March 2023	April to May 2023	Phase 2
Batch 8	13 April 2023	May to June 2023	Phase 2
Batch 9	15 May 2023	June to July 2023	Phase 2

The table below provides an overview of the communications issued for each of the three batches that relate to Phase 2.

Communication	Batch 7	Batch 8	Batch 9
Specifications	Published on 14 March 2023	Published on 13 April 2023	Published on 16 May 2023
Next EUA opening	Published on 5 April 2023	Published on 9 May 2023	Will be communicated in due course
PROD Go-Live	Published on 11 May 2023	Will be communicated in due course	Will be communicated in due course

At this stage, three batches are expected for Phase 2. Further information will be provided in due course.

9.2. COMMUNICATION PRINCIPLES

9.2.1. Types of communication

Info-Flashes: These communications announce key milestones of the project and details that all clients should be aware of, such as: publication of documentation, the opening of each platform, and confirmed Production implementation dates.



9. KEY OPERATIONAL DOCUMENTS

- Operational Notices: These communications cover programme updates to inform the market of specific milestones, EUA environment details, Optiq specifications, reminders of deadlines, strategy for delivery, changes and testing, as well as other important programme updates.
- **Technical Documentation**: New and updated documentation will be provided throughout the course of the migration and provides clients with the required information to develop and implement Optiq[®], TCS and Saturn features. This documentation is available in the IT Documentation section on the Connect Portal.

Subscription to Info-Flashes and Operational Notices can be managed through the Connect portal. Clients are invited to subscribe to these notifications and should regularly consult the list of documents shared in the IT Documentation section on Connect.

9.2.2. Communication sequence

Communication on technical deliveries will be issued in the following sequence. Please note that this is a generic sequence and it is subject to change. In addition, Production deliveries can be grouped, and in this case, as a consequence, a single Info-Flash will be sent.

	Communication subject	Communication type
1	Next EUA and Production delivery dates and technical specifications	Operational Notice
2	Reminder #1 - Next EUA and Production deliveries	Operational Notice
3	Reminder #2 – Production delivery	Info-Flash

Please note that in addition to these communications, dedicated communications on specific features are also issued prior to the deliveries.



10. CUSTOMER JOURNEY CHECKLIST



10.1. TRADING MEMBERS

10.1.1.

Borsa Italiana Trading Members not yet connected to Optiq

1. Complete Initial set-up form and CFTS form

2. Prepare & sign legal documentation

Contract	Signature
Membership Application Form	[Mandatory]
Trading Platform Access Agreement (TPAA)	[Mandatory]
Regulatory Reporting Solution Registration Form	[Mandatory]
Euronext Market Data Agreement (EMDA)	[Mandatory]
MyEuronext Terms & Conditions	[Mandatory]
Market Maker and Liquidity Provider Application Form ¹	[Mandatory]
TCS and Saturn Clearing Facility Agreement ¹	[Mandatory]
RiskGuard Service Agreement and Statement of Authority ¹	[Mandatory]

4. Request Next EUA accesses

Access	Via
TCS GUI ¹	Connect
RiskGuard ¹	Connect

3. Manage connectivity set-up

Action	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s) & Terms & Conditions	✓	×	✓	×
Complete physical set-up of connectivity	✓	×	✓	×
Perform Connectivity tests (incl. Telnet test)	✓	✓	✓	✓
Perform Market Data feed tests	✓	✓	✓	✓

✓ Mandator

✓ Mandatory for clients who need to order new connectivity/equipment and/or depending on client's set-up

× No action needed

5. Perform tests and complete relevant webforms

Test	Mandatory/Optional	
Functional tests (incl. Drop Copy ¹ and RiskGuard ¹)	[Mandatory]	
Throttling	[Recommended]	
Saturn SLC	[Mandatory]	
TCS GUI¹	[Mandatory]	
TCS via OEG ¹	[Mandatory]	
Market Data Gateway	[Mandatory]	

6. Book and validate Conformance test

Test	Mandatory/Optional	
Technical (High Availability) – on all	[Mandatory]	
member codes, protocols and segments	[Wandatory]	
Functional (incl. SBE) – on all member	[Mandatory]	
codes, protocols and segments	[ivialidatory]	

7. Perform Front-to-Back test and complete webform

8. Request PROD access

Access	Via
Logical Accesses (incl. Drop Copy and TCS via OEG)	Initial set-up form
TCS GUI ¹	Connect

9. Manage PROD set-up

Test	Mandatory/Optional
Perform connectivity tests (incl. Telnet)	[Mandatory]
Perform Market Data feed tests	[Mandatory]

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend (incl. CFTS ²)	[Mandatory]



¹ Applicable to clients who opt in for this service ² SFTP protocol

10.1.2.

Borsa Italiana Trading Members who already have an access to Optiq

1. Complete Initial set-up form¹ and CFTS form²

2. Prepare & sign legal documentation

Contract	Signature
Membership Application Form	[Mandatory]
Euronext Market Data Agreement (EMDA)	[Mandatory]
MyEuronext Terms & Conditions	[Mandatory]
Market Maker and Liquidity Provider Application Form ³	[Mandatory]
Regulatory Reporting Solution Registration Form	[Mandatory] if adding new market segments
RiskGuard service agreement and Statement of Authority ³	[Mandatory]

3. Manage connectivity set-up

Action	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s)	✓	×	✓	×
Complete physical set-up of connectivity	✓	×	✓	×
Perform Connectivity tests (incl. Telnet test)	✓	✓	✓	✓
Perform Market Data feed tests	✓	✓	✓	✓

Mandatory

Mandatory for clients who need to order new connectivity/equipment and/or depending on client's set-up

× No action needed

4. Request Next EUA accesses

Access	Via
Logical Accesses (incl. Drop Copy³ and TCS via OEG³)⁴	Connect
TCS GUI ³	Connect
RiskGuard ³	Connect

5. Perform tests and complete relevant webforms

Test	Mandatory/Optional	
Functional tests (incl. Drop Copy ³ and RiskGuard ³) ⁵	[Mandatory]	
Throttling	[Recommended]	
Saturn SLC	[Optional]	
TCS GUI³	[Recommended]	
TCS via OEG ³	[Recommended]	
Market Data Gateway	[Mandatory]	

6. Book and validate Conformance test

Test	Mandatory/Optional
Technical (High Availability) – on all member codes, protocols and segments	[Recommended]
Functional (incl. SBE) – on all member codes, protocols and segments ⁵	[Mandatory]

7. Perform Front-to-Back test and complete webform

8. Request PROD access

Access	Via
Logical Accesses (incl. Drop Copy	Initial set-up form
and TCS via OEG)	MyEuronext (accessed via Connect) (Phase 2 onwards)
TCS GUI ¹	Connect

9. Manage PROD set-up

Test	Mandatory/Optional
Perform connectivity tests (incl. Telnet)	[Mandatory]
Perform Market Data feed tests	[Mandatory]

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend	[Mandatory]

¹ Clients who already have an access to Optiq do need to return the Initial set-up form with the first sheet "Member Capacities" completed



² Applicable to clients who wish to subscribe to SFTP protocol or do not have access to current Euronext's file transfer systems

³ Applicable to clients who opt in for this service

⁴ Applicable to clients whose segments differ between Borsa Italiana and Euronext

⁵ Only for new supported features on legacy markets (done as those features are delivered)

⁶ Applicable to clients who need additional LAs

10. CUSTOMER JOURNEY CHECKLIST

10.1.3.

Euronext Trading Members who do not trade Borsa Italiana products

1. Prepare forms & sign legal documentation & forms

Contract	Signature
MyEuronext Terms & Conditions	[Mandatory]
Euronext Market Data Agreement (EMDA) ¹	[Mandatory]
RiskGuard service agreement and Statement of Authority ²	[Mandatory]
CFTS form ³	[Optional, on demand]

2. Manage connectivity set-up

Action	Mandatory/Optional
Perform OEG Connectivity tests (incl. Telnet test)	[Mandatory]
Perform Market Data feed tests ¹	[Mandatory]

3. Perform tests and complete relevant webforms

Test	Mandatory/Optional
Functional tests (incl. Drop Copy¹ and RiskGuard²)⁴	[Mandatory]
Throttling	[Optional]
Saturn SLC	[Optional]
TCS GUI ²	[Optional]
TCS via OEG ²	[Optional]
Market Data Gateway¹	[Mandatory]

4. Book and validate Conformance test

Test	Mandatory/Optional
Technical (High Availability) – on all member codes, protocols and segments	[Recommended]
Functional (incl. SBE) – on all member codes, protocols and segments ⁴	[Mandatory]

5. Perform Front-to-Back test (recommended) and complete webform

6. Request PROD access

Access	Via
Logical Accesses (incl. Drop Copy	Connect
and TCS via OEG)⁵	MyEuronext (accessed via Connect) (Phase 2 onwards)

7. Manage PROD set-up

Test	Mandatory/Optional
Perform Connectivity tests (incl. Telnet test)	[Mandatory]
Perform Market Data feed tests ¹	[Mandatory]

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend	[Mandatory]



¹ Applicable to clients who subscribe to Italian Market Data channels

² Applicable to clients who opt in for this service

³ Applicable to clients who wish to use SFTP protocol for file transfer

⁴ Only for new supported features on legacy markets (done as those features are delivered)

⁵ Applicable to clients who need additional LAs

INDEPENDENT SOFTWARE VENDORS (ISVs) 10.2.

10.2.1.

Borsa Italiana ISVs not yet connected to Optiq

1. Complete Initial set-up form and CFTS form

2. Prepare & sign legal documentation

Contract	Signature
MyEuronext Terms & Conditions	[Mandatory]
Service Provider Agreement (SPA) for ISVs – ISV agreement	[Mandatory]

3. Perform Connectivity tests

Action	Mandatory/Optional
Perform Connectivity tests (incl. Telnet test)	[Mandatory]
Perform Market Data feed tests	[Mandatory]

4. Request Next EUA accesses

Access	Via
TCS GUI¹	Connect

5. Perform tests and complete relevant webforms

Test	Mandatory/Optional
Functional tests (incl. Drop Copy¹)	[Mandatory]
Throttling	[Recommended]
TCS GUI¹	[Mandatory]
TCS via OEG¹	[Mandatory]
Market Data Gateway	[Mandatory]

6. Book and validate Conformance test

Test	Mandatory/Optional
Technical (High Availability) – on all member codes, protocols and segments	[Mandatory]
Functional (incl. SBE) – on all member codes, protocols and segments	[Mandatory]

7. Perform Front-to-Back test² and complete webform

8. Prepare for Go-Live²

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend (incl. CFTS³)	[Mandatory]



¹ Applicable to clients who opt in for this service

 $^{^{\}rm 2}\, {\rm To}$ support the Trading Members and on behalf of Trading Members

³ SFTP protocol

10. CUSTOMER JOURNEY CHECKLIST

10.2.2.

Borsa Italiana ISVs who already have an access to Optiq

1. Complete CFTS form¹

2. Prepare & sign legal documentation

Contract	Signature
MyEuronext Terms & Conditions	[Mandatory]

3. Perform Connectivity tests

Action Mandatory/Optio	
Perform Connectivity tests (incl. Telnet test)	[Optional]
Perform Market Data feed tests	[Mandatory]

4. Request Next EUA accesses

Access	Via
Logical Accesses (incl. Drop Copy ² and TCS via OEG ²) ³	Connect
TCS GUI ³	Connect

5. Perform tests and complete relevant webforms

Test	Mandatory/Optional	
Functional tests (incl. Drop Copy²)4	[Mandatory]	
Throttling	[Recommended]	
TCS GUI ²	[Recommended]	
TCS via OEG ²	[Recommended]	
Market Data Gateway	[Mandatory]	

6. Book and validate Conformance test

Test	Mandatory/Optional	
Technical (High Availability) – on all member codes, protocols and segments	er [Recommended]	
Functional (incl. SBE) – on all member codes, protocols and segments ⁴	[Mandatory]	

7. Perform Front-to-Back test⁵ and complete webform

8. Prepare for Go-Live⁵

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	

¹ Applicable to clients who wish to use SFTP protocol for file transfer or do not have access to current Euronext's transfer file systems



² Applicable to clients who opt in for this service

³ Applicable to clients whose segments differ between Borsa Italiana and Euronext

⁴ Only for new supported features on legacy markets (done as those features are delivered)

 $^{^{\}rm 5}$ To support the Trading Members and on behalf of Trading Members

10. CUSTOMER JOURNEY CHECKLIST

10.2.3.

Euronext ISVs who are not connected to Borsa Italiana markets

1. Prepare forms & sign legal documentation & forms

Contract	Signature
MyEuronext Terms & Conditions	[Mandatory]
CFTS form¹	[Optional, on demand]

2. Perform Connectivity tests

Action Mandatory/Optio	
Perform Connectivity tests (incl. Telnet test)	[Optional]
Perform Market Data feed tests ²	[Mandatory]

3. Perform tests and complete relevant webforms

Test	Mandatory/Optional
Functional tests (incl. Drop Copy³)⁴	[Mandatory]
Throttling	[Optional]
TCS GUI ³	[Optional]
TCS via OEG³	[Optional]
Market Data Gateway ²	[Mandatory]

4. Book and validate Conformance test

Test	Mandatory/Optional	
Technical (High Availability) – on all member codes, protocols and segments	?S, [Recommended]	
Functional (incl. SBE) – on all member codes, protocols and segments ⁴	[Mandatory]	

5. Perform Front-to-Back test (recommended)⁵ and complete webform

6. Prepare for Go-Live⁵

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend	[Mandatory]

¹ Applicable to clients who wish to use SFTP protocol for file transfers



² Applicable to clients who subscribe to Italian Market Data channels

³ Applicable to clients who opt in for this service

⁴Only for new supported features on legacy markets (done as those features are delivered)

⁵ To support the Trading Members and on behalf of Trading Members

10.3. APPLICATION SERVICE PROVIDERS (ASPs), **EXTRANET SERVICE PROVIDERS (ESPs)**

10.3.1.

Borsa Italiana ASPs and ESPs not yet connected to Optiq

[Mandatory]

1. Complete CFTS form¹

MyEuronext Terms & Conditions

2. Prepare & sign legal documentation Contract Signature Euronext Market Data Agreement (EMDA) [Mandatory] Service Provider Agreement (SPA) for ASPs [Mandatory]¹ Service Provider Accreditation Agreement [Mandatory]2 (SPAA)

3. Manage Connectivity set-up

	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s)	✓	X ³	✓	√ 4
Complete physical set-up of connectivity	✓	X ³	✓	×
Perform Connectivity tests (incl. Telnet test)	\checkmark	× ³	✓	\checkmark
Perform Market Data feed tests	✓	X 3	✓	✓

[✓] Mandatory

4. Perform Market Data Gateway test

5. Manage PROD set-up

Test	Mandatory/Optional
Perform Connectivity tests (incl. Telnet test)	[Mandatory]
Perform Market Data feed tests	[Mandatory]

6. Prepare for Go-Live

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	

Note: for EUA, ASPs should follow the steps listed for ISVs.



[✓] Mandatory for clients who need to order new connectivity/equipment and/or depending on chosen model (mandatory if provide end user(s))

X No action needed

¹ For ASPs only, not ESPs

² For ESPs and for directly-connected ASPs

³ ASPs and ESP not allowed in colocation indirect

⁴ For ASPs behind service provider, only for non-physical connectivity purposes

10. CUSTOMER JOURNEY CHECKLIST

10.3.2.

Borsa Italiana ASPs and ESPs who already have an access to Optiq

1. Complete CFTS form¹

2. Prepare & sign legal documentation

Contract	Signature	
Euronext Market Data Agreement (EMDA)	[Mandatory]	
Service Provider Accreditation Agreement (SPAA)	[Mandatory] ²	
MyEuronext Terms & Conditions	[Mandatory]	

3. Manage Connectivity set-up

	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s)	✓	X 3	✓	√ 5
Complete physical set-up of connectivity	✓	X 3	√ 4	×
Perform Connectivity tests (incl. Telnet test)	\checkmark	X 3	✓	\checkmark
Perform Market Data feed tests	✓	X 3	✓	✓

[✓] Mandatory

4. Perform Market Data Gateway test and complete webform

5. Manage PROD set-up

Test	Mandatory/Optional	
Perform Connectivity tests (incl. Telnet test)	[Mandatory]	
Perform Market Data feed tests	[Mandatory]	

Action	Mandatory/Optional
Register and participate in Dress Rehearsals	[Mandatory]
Test final set-up on the migration weekend	[Mandatory]



[✓] Mandatory for clients who need to order new connectivity/equipment and/or depending on chosen model (mandatory if provide end user(s))

[×] No action needed

¹ For ASPs only, not ESPs and applicable to clients who wish to use SFTP protocol for file transfer or do not have access to current Euronext's file transfer systems

 $^{^{\}rm 2}\,\mbox{For ESPs}$ and for directly-connected ASPs

³ ASPs and ESP not allowed in colocation indirect

⁴ For clients connecting to Italian markets

⁵ For ASPs connecting to Italian markets behind service provider, only for non-physical connectivity purpose

10. CUSTOMER JOURNEY CHECKLIST

10.3.3.

Euronext ASPs and ESPs who do not trade Borsa Italiana products

1. Complete CFTS form¹

2. Prepare & sign legal documentation

Contract	Signature
MyEuronext Terms & Conditions	[Mandatory]
Euronext Market Data Agreement	[5,6]
(EMDA) ²	[Mandatory]

3. Manage Connectivity set-up

Action	Mandatory/Optional	
Perform OEG Connectivity tests (incl. Telnet test)	[Mandatory]	
Perform Market Data feed tests ²	[Mandatory]	

4. Perform Market Data Gateway test² and complete webform

5. Manage PROD set-up

Test	Mandatory/Optional	
Perform Connectivity tests (incl. Telnet test)	[Mandatory]	
Perform Market Data feed tests ²	[Mandatory]	

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	



¹ For ASPs only, not ESPs and applicable to clients who wish to use SFTP protocol for file transfer, on demand

² Applicable to clients who subscribe to Italian Market Data channels

DATA VENDORS 10.4.

10.4.1.

Borsa Italiana Data Vendors not yet connected to Optiq

1. Complete CFTS form

2. Prepare & sign legal documentation

Contract	Signature
Euronext Market Data Agreement (EMDA)	[Mandatory]
MvEuronext Terms & Conditions	[Mandatory]

3. Manage Connectivity set-up

	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s)	✓	N/A tbc	✓	√ 1
Complete physical set-up of connectivity	✓	N/A tbc	√ 1	×
Perform Connectivity tests (incl. Telnet test)	✓	✓	✓	✓
Perform Market Data feed tests	✓	✓	✓	✓

[✓] Mandatory

4. Perform Market Data Gateway test and complete webform

5. Manage PROD set-up

Test	Mandatory/Optional	
Perform connectivity tests (Telnet)	[Mandatory]	
Perform Market Data feed tests	[Mandatory]	

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	



[✓] Mandatory for clients who need to order new connectivity/equipment and/or depending on chosen model (mandatory if provide end user(s))

X No action needed

¹ For clients connecting to Italian markets

10. CUSTOMER JOURNEY CHECKLIST

10.4.2.

Borsa Italiana Data Vendors who already have an access to Optiq

1. Complete CFTS form¹

2. Prepare & sign legal documentation

Contract	Signature
Euronext Market Data Agreement (EMDA)	[Mandatory]
MyEuronext Terms & Conditions	[Mandatory]

3. Manage Connectivity set-up

	Colo direct	Colo indirect	Connectivity direct	Connectivity indirect
Complete Order form(s)	✓	N/A tbc	✓	√ 2
Complete physical set-up of connectivity	✓	N/A tbc	√ 2	×
Perform Connectivity tests (incl. Telnet test)	✓	\checkmark	✓	✓
Perform Market Data feed tests	✓	✓	✓	✓

[✓] Mandatory

4. Perform Market Data Gateway test and complete webform

5. Manage PROD set-up

Test	Mandatory/Optional
Perform connectivity tests (Telnet)	[Mandatory]
Perform Market Data feed tests	[Mandatory]

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	



[✓] Mandatory for clients who need to order new connectivity/equipment and/or depending on chosen model (mandatory if provide end user(s))

X No action needed

 $^{^1\,} Applicable\ to\ clients\ who\ wish\ to\ use\ SFTP\ protocol\ for\ file\ transfer\ or\ do\ not\ have\ access\ to\ current\ Euronext's\ transfer\ file\ systems$

² For Data Vendors connecting to Italian markets

10. CUSTOMER JOURNEY CHECKLIST

10.4.3.

Euronext Data Vendors who do not trade Borsa Italiana products

1. Complete CFTS form¹

2. Prepare & sign legal documentation

Contract	Signature
Euronext Market Data Agreement (EMDA) ²	[Mandatory]
MyEuronext Terms & Conditions	[Mandatory]

3. Manage connectivity set-up

Action	Mandatory/Optional	
Perform OEG Connectivity tests (incl. Telnet test)	[Mandatory]	
Perform Market Data feed tests ²	[Mandatory]	

4. Perform Market Data Gateway test² and complete webform

5. Manage PROD set-up

Test	Mandatory/Optional	
Perform Connectivity tests (incl. Telnet test)	[Mandatory]	
Perform Market Data feed tests ²	[Mandatory]	

Action	Mandatory/Optional	
Register and participate in Dress Rehearsals	[Mandatory]	
Test final set-up on the migration weekend	[Mandatory]	



¹ Applicable to clients who wish to use SFTP protocol for file transfers

² Applicable to clients who subscribe to Italian Market Data channels

APPENDIX

Migration Timeline Phase 2

*	Activity or Milestone	Start (when applicable)	End/Deadlines	Via
	Confirm colocation set-up	January 2023	April 2023	-
Colocation set- up	Order colocation equipment	January 2023	April 2023	-
	Sign colocation legal documentation (incl. order forms)	April 2023	Mid-May 2023	-
	Send and install colocation equipment to the new DC	March 2023	Mid-May 2023	-
	Complete connectivity configuration and tests	April 2023	June 2023	-
	Confirm connectivity set-up	January 2023	February 2023	-
Connectivity	Order additional equipment (if client changes their connectivity)	January 2023	March 2023	-
set-up	Sign connectivity legal documentation (incl. order forms)	October 2022	Mid-May 2023	-
	Deliver new links (if connectivity changes)	February 2023	May 2023	-
	Complete connectivity configuration and tests	March 2023	June 2023	-
	Provide details for CFTS	January 2023	Mid-March 2023	MyEuronext
Preparation for EUA access	Provide details for EUA accesses: member capacity and logical accesses needs (incl. Drop Copy, Saturn and TCS)	January 2023	Mid-March 2023	Initial set-up form
	Manage accesses to EUA: logical accesses (incl. Drop Copy, Saturn and TCS)	February 2023	March 2023	Initial set-up form or MyEuronext
	Next EUA availabilty for trading functional testing	Mid-April 2023	N/A	-
	Next EUA availability for clearing and settlement specific features	June 2023	N/A	-
	Deliver testable version of software (for ISVs)	N/A	Beginning of June 2023	-
Testing in EUA	Book and complete functional conformance tests	May 2023	End of June 2023	With Analyst + webform for confirmation
	Complete trading tests (High Availability, Market Data Gateway (MDG), Throttling, Saturn Reporting & SLC, TCS GUI if applicable)	April 2023	End of June 2023	Webform for confirmation
	Complete front-to-back tests	June 2023	End of June 2023	Webform for confirmation
	Sign SPA (for ISVs and ASPs)	July 2022	March 2023	-
	Sign MyEuronext Terms & Conditions	July 2022	Mid-March 2023	-
Legal	Sign EMDA contracts	July 2022	1 April 2023	-
documentation in preparation	Sign Membership contracts	July 2022	June 2023	-
for PROD access	Sign SPAA (for ASPs and ESPs)	July 2022	June 2023	-
access	Sign TCS and Saturn Clearing Facility Agreement (for TCS GUI users only)	January 2023	June 2023	-
	Complete Market Maker and Liquidity Provider Application Form	January 2023	June 2023	-
Droparation for	Provide details for CFTS if not done at the same time as for EUA	February 2023	June 2023	MyEuronext
Preparation for PROD access	Request PROD accesses if not done at the same time as for EUA: logical accesses (incl. Drop Copy, Saturn and TCS)	May 2023	June 2023	Initial set-up form or MyEuronext
	Register for external Dress Rehearsals	May 2023	June 2023	Webform
Preparation for	External Dress Rehearsal 1	-	8 July 2023	Webform for attendance confirmation
Go-live	External Dress Rehearsal 2	-	22 July 2023	Webform for attendance confirmation
	Go-live	-	11 September 2023	-
	Register for contingency external Dress Rehearsals		September 2023	Webform
milestones	Contingency Dress Rehearsal	-	16 September 2023	Webform for attendance confirmation
	Contingency Go-live	-	25 September 2023	-



CONTACTS

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

Team	Contact details

Operational Client Services

Clients' first point of contact for the Borsa Italiana migration. Technical & functional assistance with development and testing on Optiq. Assistance with the use of the EUA environment, conformance tests, timeline and customer readiness checklist.

Connectivity

Clients' point of contact for connectivity matters related to the Borsa Italiana migration onto Optiq.

Membership

Market participants' point of contact for the membership contracts and any relevant update to the membership requirements (i.e., update contacts or membership declarations)

Market Access

Support for market participants' access and connections to Euronext markets, including Logical Accesses on Optiq (i.e. access and log-in credentials to Optiq OEG).

- Italy +39 02 4541 1399
- France +33 1 8514 8585
- Belgium +32 2620 0585
- Norway +31 20 721 9585
- Portugal +351 2 1060 8585
- Ireland +353 1 6174 289
- UK +44 207 660 8585
- Netherlands +31 20 721 9585
- Email: Optigmigration@euronext.com
- Tel: +39 02 72426964
- Email Borsa Italiana:
 BIt-Membership@euronext.com
- Email Euronext:
 EuronextMembership@euronext.com
- Email: market-access@euronext.com



