

Document title

BORSA ITALIANA MIGRATION TO OPTIQ PHASE 1 (EQUITIES & ETF) – GO-LIVE WEEKEND GUIDELINES

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INTRODUCTION

DOCUMENT PURPOSE

The purpose of this document is to inform clients about the agenda and activities that will take place during the **Go-Live Weekend organised in the context of the Borsa Italiana phase 1 (Equities & ETF markets) migration onto Optiq expected to take place on the 27th of March 2023.**

This document aims to provide guidance on prerequisites, timing, scope and a detailed schedule to the clients for them to prepare for the event. The document also provides information on the roll-back plan in the unlikely event of a No-Go.

TARGET AUDIENCE

The intended audience of this document is any client active on the Euronext and Borsa Italiana Markets (Trading Member Firm, ASP, ESP, ISV, Data Vendor) on the:

- <u>Legacy Euronext markets</u>: already connected to Optiq[®] and not connected to Borsa Italiana markets
- <u>Italian markets</u>: connected to Borsa Italiana markets and moving to Optiq[®] and TCS features

DOCUMENT HISTORY

DOCUMENT VERSION DATE		CHANGE DESCRIPTION
1.0	20 March 2023	First version
1.1	21 March 2023	"Point of no Return in section 5.4 adjusted"

ASSOCIATED DOCUMENTS

The following are the associated documents, which should be read in conjunction with this document or which provide other relevant information for the user:

Document	Description
Migration Guidelines - Borsa Italiana Optiq Migration v3.1	Provides clients with information, milestones and timing regarding the migration strategy of the Borsa Italiana markets to Optiq so that they can prepare for a successful migration.
Euronext Cash and Derivatives Markets Optiq OEG Service - Interface Specification - External - v5.16.1	Provides an overview of all the IP addresses and connectivity details needed to connect to the Optiq Order Entry Gateway.

Euronext Cash and Derivatives Markets – Optiq MDG Production Connectivity - External - v5.18.0 Euronext Optiq Market Data Gateway MDG Lite - Production	Provides an overview of all the Multicast IP addresses and connectivity details needed to connect to the Optiq Market Data Gateway. Provides an overview of all the Multicast and TCP/IP addresses and connectivity details needed to connect to
Connectivity v1.0 Euronext Cash and Derivatives	the Optiq MDG Lite. This document sets out the client messages specifications for Optiq OEG using the SBE format. More
Markets - Optiq OEG SBE Messages - Interface Specification - External - v5.21.0	specifically, it describes the contents of administrative and application messages and provides detailed field descriptions.
Euronext Cash and Derivatives Markets - Optiq OEG FIX 5.0 Messages - Interface Specification - External - v5.21.0	This document sets out the client messages specifications for Optiq OEG using the FIX format. More specifically, it describes the contents of administrative and application messages and provides detailed field descriptions.
Euronext Cash Markets - Optiq OEG MDG - Kinematics Specification - External - v5.21.0	The purpose of this document is to describe Cash Market Kinematics for Optiq Order Entry Gateway (OEG) and Market Data Gateway (MDG).
Euronext Cash and Derivatives Markets - Optiq Files - Interface Specification - External - v5.20.0	The purpose of this document is to describe all the files required for Trading on Optiq platform.
Euronext Cash and Derivatives Markets - Optiq MDG Messages - Interface Specification - External - v5.20.0	This document describes the Optiq Market Data Gateway.
Euronext Cash and Derivatives Markets - Common File Transfer System - Members User Guide - External - v5.21.0	This document provides general technical information about Euronext Common File Transfer System Services (CFTS).
Euronext Cash Markets - TCS Web Access - User Guide - External - v5.20.0	This document describes how to use the dedicated Web Interface allowing Euronext members to register Off Book but On Exchange trades in the Euronext Trade Confirmation System (TCS).
Euronext Cash and Derivatives Markets - Euronext File Services - User Guide - External - v5.20.0	This document intends to provide general technical information about Euronext File Services.

DEFINITIONS

Go-Live Weekend: test in target condition that takes place before the Monday Go-Live, for clients to validate their final readiness in the Production environment.

Roll-back: Data should be reverted back to the condition as on the Friday evening, before the Go-Live Weekend.

ESP: Extranet Service Provider; Service Provider providing infrastructure and/or hosting services to clients

ASP: Application Service Provider; Service Provider providing hosting services and/or applications to their clients

 $\ensuremath{\text{ISV:}}$ Independent Software Provider; Service Providers that provide trading and/or market data software to their clients

Data Vendor: Provider of Market Data to clients

SP: Service Provider

- **OEG:** Order Entry Gateway
- MDG: Market Data Gateway
- TAL: Trading At Last
- **CMC:** Client Managed Connectivity
- EMC: Euronext Managed Connectivity
- MTA: Euronext Milan
- EGM: Euronext Growth Milan
- **GEM:** Borsa Italiana Global Equity Market
- MIV: Euronext MIV Milan
- TAH: Trading After Hours
- ETF: Exchange-Traded Products including ETFs, ETCs, ETNs
- TCS: Trade Confirmation System
- **EFS:** Euronext File Services
- CFTS: Common File Transfer System

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1 GO-LIVE WEEKEND OVERVIEW

The objective of the Go-Live Weekend is to prepare for Phase 1 Go-Live of the Borsa Italiana markets onto Euronext's trading system, Optiq, and to perform a final check and ensure readiness for the Monday's Go-Live taking place on 27 March.

Clients are invited to validate that their applications can operate both on the Borsa Italiana Equity and ETF markets tradable from Optiq as well as the remaining Borsa Italiana Markets operated on the Millennium IT and SOLA platforms.

At the end of the Go-Live Weekend for the phase 1, a Go/No-Go decision shared with clients.

In the unlikely event that Euronext should decide not to continue with the migration, clients should be prepared for the Contingency Schedule and roll-back of their systems.

1.1 PHASE 1 CRITICAL DATES

- Go-Live Weekend: 25 March 2023
- **Go-Live:** 27 March 2023¹

It is **mandatory** for trading members, ASPs and Data Vendors connected to Borsa Italiana markets to **participate in the Go-Live Weekend** (even if they already successfully took part in the Customer Dress Rehearsals).

ESPs and **ISVs** are expected to support their clients during the Go-Live Weekend.

Notes:

- Go-Live phase 1 (Equities & ETF) planned on 27 March 2023 is subject to regulatory approval.
- As a reminder, the Go-Live Weekend is scheduled to validate that client applications are ready for the Monday Go-Live (27 March 2023). It is not intended to simulate a trading day with extensive clients testing. As a consequence, during the Saturday clients will have to logon (Mandatory) and as instruments will be opened, they can place orders / execute trades (Optional).

At the end of the Go-Live Weekend, clients must purge their applications of all the data that was generated on the Saturday. The client application however does not need to be rolled back as it should be compatible with the Monday of the Go-Live: 27 March 2023¹. Following the Go-Live Weekend, markets will open on the next Monday with the Borsa Italiana Equity and ETF instruments migrated to Optiq. Contingency dates (only applicable in unlikely event of a No-Go decision):

As a reminder, below are the contingency dates in the unlikely event of No-Go decision:

• Contingency Customer Dress Rehearsal: 1 April 2023

Contingency Go-Live: 17 April 2023

1.2 PRE-REQUISITES

Only clients that have completed the full readiness (<u>please refer to the Migration</u> <u>Guidelinesl</u>) will be authorised to take part in the Go live and Go-Live Weekend.

Note that it is also mandatory for clients to register for the Go-Live Weekend: <u>Registration</u> <u>Form</u>.

Note: for a smooth operation during the Go-Live Weekend and to ensure the Go-Live on 27 March 2023, clients are requested not to introduce changes to their infrastructure or applications that would jeopardise their readiness for the Go-Live.

1.3 COMMUNICATION DURING GO-LIVE WEEKEND

During the Go-Live Weekend, customer support will be provided via:

Market Status:

Euronext will keep clients informed of all activities through the <u>Market Status Webpage</u>: <u>https://live.euronext.com/market-status</u>.

All clients are advised to subscribe to the Market Status alerts, which can be done through My Subscriptions menu on the <u>Euronext customer connect web portal</u>.

Customer Support:

Support will be provided to clients by the Optiq Migration Team from 10:00 CET to 18:00 CET.

In case of any issues or questions related to the tests, customers may contact the Optiq Migration Team ahead of the tests and during the Migration weekend by email at optiqmigration@euronext.com and by phone at:

- 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

1.4 TIME IN FILES DURING GO-LIVE WEEKEND AS A RESULT OF DAY LIGHT SAVING

Clients should be aware that on Sunday 26 March, a daylight saving time change will take place, moving to CEST (UTC+2). As a consequence, clients must carefully manage the timetable available as Euronext will update the timetables available in the files (for example OptiqMDG_Production_TimeTableFile_Block_20230327.xml) on Friday after close to reflect the time change on Monday. As a result, clients will notice this change in the files on Saturday at the start of the test and should keep this in mind. Please see below example of how it will be represented in the EFS, CFTS and MDG files.

	Time in files* on Friday 24 March 2023	Time in files* on Saturday 25 March 2023 including Day Light Saving	Time in files* on Monday 27 March 2023 including Day Light Saving
Phase Time in Optiq expressed in UTC (Universal Time coordinated)	08:00:00z UTC	07:00:00z UTC	07:00:00z UTC
Human readable time expressed in CET (UTC+1 hour) / CEST (UTC+2 hours)	09:00 CET	09:00 CET	09:00 CEST

*Time in files refers to the times displayed in the Timetable Files that are made available on EFS, CFTS and MDG.

2 SCOPE OF THE TEST

The scope of the Go-Live Weekend is outlined below for each specific section.

2.1 ENVIRONMENT

During the Go-Live Weekend, only the **Production environment** is in scope.

2.2 MARKETS

During the Go-Live Weekend, clients should perform **Technical** (connectivity, logon, etc.) and can also manage **Functional Testing** (e.g testing the trading activity and market data reception) for the Euronext Cash Markets, including the Italian Equity and ETF markets migrating to Optiq & TCS.

Clients may also validate Trading and Market Data Reception for the other Borsa Italiana Cash & Derivatives Markets that remain on the Millennium IT and SOLA platforms (and will move to Optiq in Phases 2 and 3) in order to simulate the set-up that will be in place on Monday 27 March 2023.

2.2.1 Markets in scope

The following markets will be part of the Go-Live Weekend :

	Optiq	TCS	Millennium	SOLA
Euronext Markets	 ✓ Equity Markets ✓ Funds Markets ✓ Fixed Income Markets ✓ Warrant & Certificates Markets 	 ✓ OBOE ✓ Nav trading facility Dutch Funds 	N/A	N/A
Borsa Italiana Markets	 ✓ MTA ✓ EGM ✓ GEM ✓ MIV ✓ Trading After Hours ✓ ETF (ETF Plus) 	✓ ATFund✓ OBOE	 Fixed Income Markets (MOT, ExtraMOT, Bond-X) Warrant & Certificates Markets (Sedex, Cert- X) Equity ETLX 	✓ Derivatives Markets (IDEM)

Note: clients connecting to ATFund segment, if relevant for them, should perform testing on TCS GUI as a back-up solution.

2.2.2 Markets out of scope

The following markets will <u>not</u> be part of the Go-Live Weekend on **Optiq**: © 2023, Euronext 9 of 26

Euronext Derivatives Markets on Optiq

Please note that clients will not be able to log on to these markets. Clients should take this into consideration for applications that perform an automatic logon.

All Bourse De Luxembourg (BDL) markets

Even though the BDL market will technically be available, Euronext will not open the instruments for trading on this market.

2.3 APPLICATIONS AND SERVICES

Please see below the applications and services that are **available** for the Go-Live Weekend.

EURONEXT APPLICATION	SERVICES
Optiq	 Order Entry Gateways (OEG) Market Data Gateway (MDG) Drop Copy
MDG Lite	MDG Lite MulticastMDG Unicast - the TCP compressed service
Trade Confirmation System (TCS) Order Entry Gate and Web (GUI)	The Trade Confirmation system for Off-Market trades and ATFund Market, which can be accessed either via Logical Access or via Web (GUI) Note: Clients entering declarations on Italian instruments using the TCS Web GUI should use the Trading Code instead of the ISIN Code. There is no impact on declarations entered on other instruments or via the OEG.
Euronext File Services (EFS) for legacy clients	Referential Files Standing Data SBE templates Tick Sizes
Common File Transfer System (CFTS) for Borsa Italiana clients	 Referential Files, fully available for testing Standing Data SBE templates Tick Sizes

To note:

During the Go-Live Weekend, Euronext OEG and MDG will be in production on the SBE template version 321. Clients can use any of the earlier versions of SBE as long as their application is backward/forward compatible in accordance with the <u>Euronext</u> <u>Compatibility Rules</u>.

2.4 OUT OF SCOPE FOR THE GO-LIVE WEEKEND

On 25 March (Go-Live Week-end), the following elements are out of scope and will not be available during the test:

Post-trade systems & Front-To-Back testing:

Clients should be advised that post-trade systems and front-to-back testing will not be available during the Go-Live Weekend.

Clients must connect to the Next EUA environment to test all their post-trade applications and validate their front-to-back systems (with a strong point of attention related to the reconciliation key used for reconciliation process).

Disaster Recovery sites:

Euronext will not activate the Euronext Disaster Recovery site. Clients must validate connectivity to the Euronext Disaster Recovery site by performing a Telnet test to the Destination IPs of the site, which can be executed 24 hours 7 days a week.

- Euronext Saturn Application (ARM, APA, SLC, OBOE, ...)
- MyEuronext portal
- Index Calculation and Dissemination, as well as the index Standing Data files: Client to note that no Index standing data file will be available during Go-Live Weekend
- End of Day (EOD) file order and trade files
- All BITA applications & services not mentioned above as part of the scope

3 TEST DETAILS FOR GO-LIVE WEEKEND

During the Go-Live Weekend, we highly recommend that clients perform a logon from:

- all their firm's IDs
- at least one of their network sources
- with at least one Logical Access.

Clients can, optionally, send orders and execute trades during the Saturday.

TEST	REQUIREMENT DURING GO-LIVE WEEKEND		
Connectivity	Mandatory for Trading Members, Service Providers and Data Vendors. They must perform a Telnet test <i>before</i> the Go-Live Weekend.		
	Mandatory for all Trading Members that trade on Borsa Italiana markets to perform:		
Logon	 At least one logon from one of the forecasted network sources (i.e. Colocation, CMC, EMC, connectivity via a Service Provider) that may be used in Production 		
	 A logon with at least one Logical Access per segment they trade on 		
	 The logon with all Member Codes / FIRM IDs owned by the Trading Members is optional 		
Orders and trades	Optional for all Trading Members that trade on Borsa Italiana markets		
Market Data	Mandatory for Trading Members, Service Providers and Data Vendors who are connected to Borsa Italiana markets to validate reception of Market Data		

Optiq OEG IP-Filtering security

The **Optiq OEG IP-Filtering** security will be put in place during the Go-Live Weekend as this is already the case during trading on normal Trading Day.

Only source IPs already registered for dedicated Firm IDs (Logical Access) will be allowed to receive a logon acknowledgement.

/!\ Clients who are not yet connected to Optiq should be aware that **this security will be applicable on the Go-Live** planned for 27 March 2023.

Euronext is following the below principles to ensure clients are properly enabled on Optiq:

For clients not impacted by an infrastructure change	 Euronext has replicated the source IPs set-up from the Borsa Italiana markets onto Optiq.
For clients impacted by an infrastructure change	 For Direct clients: IPs are directly assigned and registered by Euronext. For Indirect clients (clients behind Service Providers): IPs are assigned by the Service Provider according to the range assigned to the Service Provider by Euronext. Then, IPs are registered by Euronext upon request from the Service Providers.

⇒ Clients are requested to verify that all their source IPs are properly set up either with Euronext directly or with their Service Provider.

Prior to the Go-Live Weekend, clients are requested to test the logon on the Next EUA environment, as Optiq OEG IP-Filtering is already in place on this environment.

In case of any issues related to Logon, clients are advised to contact the Optiq Migration Team before the Go-Live Weekend in order for it to be fixed for the Go-Live Weekend.

In addition, Euronext can provide clients with the list of source IPs that are already registered. Such list can be obtained upon request to <u>cas@euronext.com</u> (the request must include Firm ID).

Validate the reception of Market Data (MDG)

Trading Members and Data Vendors are requested to validate **the Market Data messages received**. The Market Data messages received could be technical or functional, in case of orders and trades.

4 SCHEDULE

Optiq Schedule

Please see below the detailed schedule for the Go-Live Weekend.

For information, in the case of any changes to the scheduled activities on Go-Live Weekend day, Euronext will keep clients informed through the Market Status Webpage: <u>https://live.euronext.com/market-status</u>

TIME CET	DESCRIPTION OF SCHEDULE ON OPTIQ	EQT	ETF	BLK
	 Start of Optiq, client's connection and referential files Starting of Optiq by Euronext. Clients will be informed via Market status when all segments are up. Clients can start connecting to Optiq in the Production environment. 			
	 Referential File publication on CFTS and EFS: Euronext will publish all Referential files on CFTS and EFS². The complete list of files is provided in <u>paragraph 5</u>. Clients should download and integrate the referential files. 			
11:00	 Notes: The Index file (OptiqMDG_PROD_CashStandingDataFile_Indices_ yyyymmdd.xml) will not be published as index calculation is out of scope. When downloading the Standing Data clients should target the date of next Monday as this date will be part of the filename. The time schedule described below for the Equity segment will be applied to all Borsa Italiana Equity trading groups, including those that in production have a single uncrossing pattern or a different sequencing of phases. 			
	 Optiq up & running At this time, clients need to be connected and have validated their Logical Access(es) to Optiq in the Production environment hosted in the Aruba Data Centre in Bergamo, Italy. 			
11:30	 Note: As a reminder, clients should perform a successful Logon from at least one of the forecasted network sources (i.e. Colocation, CMC, EMC, connectivity via a Service Provider) that may be used in Production. TAH instruments won't be opened for trading during the go live week-end. 			
12:00	 Standing Data Broadcast over MDG Publication of Market data referential messages over the Euronext Market Data Gateway (MDG). Clients to validate the reception of standing data over the Market Data Gateway 	\checkmark	\checkmark	
12:30	 Call Phase on Equities and ETF Clients to send orders to the Optiq trading platform (optional). 	\checkmark	\checkmark	
13:00	 Uncrossing & Continuous trading on Equities and ETF Clients to trade on all Euronext Cash Markets including TCS (optional). 	\checkmark	\checkmark	
15:00	 Call Phase (Closing) Clients to send orders for the Trading At Last (TAL) phase to the Optiq trading platform (optional). 	\checkmark	\checkmark	

 $^{^2}$ Client to contact Optiq Migration team in case they cannot retrieve the Referential Data File via its SFTP protocol.

15:05	 Closing Uncrossing on Equities and ETF & TAL Continuous trading of the TAL and Random Uncrossing trading phase. Clients to perform functional testing during the TAL and Random Uncrossing (optional). 	\checkmark	\checkmark	
15:10	 Closed Phase on Equities and ETF & TAL Closing of the normal trading session. Clients to validate the successful closing of the continuous trading session and the TAL & Random uncrossing. 	\checkmark	\checkmark	
15:15	 Closed Phase on Equities and ETF Closing of the normal trading session. Clients to validate the successful dissemination of the Closing Price. 	\checkmark	\checkmark	
15:15	 End of Go-Live Weekend Test Euronext will stop Optiq and all applications hosted in the Aruba Data Centre in Bergamo, Italy. Clients can disconnect from all Euronext applications. 	\checkmark	\checkmark	\checkmark
	Note : It is mandatory that clients purge the data generated on Saturday from their internal systems to be ready for the Trading Session on the following Monday morning.	\checkmark	\checkmark	\checkmark
	Go/No-Go confirmation for the go live on 27 March			
16:30	The final confirmation (point of no return) will be communicated via Euronext Market Status and with the publication of an Info-Flash			
	Roll back strategy in case of a No-Go is described below in this document.			

Clients are responsible for purging all market data and order entry data sent and received during the Saturday Go-Live Weekend test. All client applications should be reverted back to be able to trade on the following Monday morning and ensure their readiness for the next trading day following any Saturday test.

Clients should note that, during the Go-Live Weekend, the Millennium IT and SOLA platforms will follow a dedicated schedule on the opened markets.

MIT & SOLA detailed schedule

TIME CET	DESCRIPTION OF SCHEDULE ON MIT	SeDeX	мот	EuroTLX
11:30	Pre Trading	\checkmark	\checkmark	\checkmark
12:30	Opening Auction Call		\checkmark	
12:45	Quoting Period	\checkmark		\checkmark
13:00	Continuous (Regular) Trading	\checkmark	\checkmark	\checkmark
15:00	Closing Auction Call		\checkmark	
15:05	Post Close	\checkmark	\checkmark	\checkmark

TIME CET	DESCRIPTION OF SCHEDULE ON SOLA	IDEM
12:30	Preopening (only for instruments with auction)	\checkmark
13:00	Continuous (Regular) Trading	\checkmark
15:30	Closing for all IDEM markets	\checkmark

Note: Borsa Italiana markets on OBOE will follow Optiq patterns mentioned above.

5 IMPORTANT INFORMATION

Clients are advised to keep the below reminders in mind before, during and after the Go-Live Weekend.

5.1 PURGE OF ORDER BOOKS

Purge of the Equity & ETF order books on Millennium IT platform

Clients should be aware that on Friday 24 March 2023 Euronext will purge all the unexecuted orders around 18:00 CET on the Euronext Milan, Euronext MIV Milan, Euronext Growth Milan, BIT GEM and ETPPlus markets on the Millennium IT platform. There is no impact of this action for instruments traded on Optiq and there will be no order purge on Optiq.

Order books during and after the Go-Live Weekend

On Saturday 25 March and on Monday 27 March, the order books for the Borsa Italiana Equity and ETF markets , hosted on Optiq will be empty on Optiq (as a consequence of the order purge on the Equity & ETF markets taking place on Friday on the **Millennium IT platform**)

Order books in case of No-Go

In the case a No-Go on Saturday 25 March 2023 and a roll back of the Borsa Italiana Equity & ETF Markets to the **Millennium IT platform**, the orders that were purged on the **Millennium IT platform on** Friday 24 March 2023 will not be restored.

More details related to this roll-back plan is provided below in this document.

5.2 REFERENCE DATA PRICES AND INSTRUMENTS AVAILABILITY DURING GO-LIVE WEEKEND

Instruments available in Production

- All instruments currently tradable on Borsa Italiana (Milan) Equities and ETF Markets are technically created in the Optiq Production environment and will be available for testing during the Go-Live Weekend.
- Clients should note that, during the Week-End and at Go-Live, a number of instruments will share the same mnemonic codes across different Market Identifier Codes (MICs).

The list of duplicate mnemonics can be found in Appendix.

 As of Saturday 24 March 2023, clients should fully and only refer to the referential files (standing data) published on EFS and CFTS for accessing to the full list of instruments available on the market.

Reference Data Price

- The reference prices available during the Go-Live Weekend and on Monday morning on Optiq <u>should</u> reflect the last closing prices coming from MIT Platform on Friday 24 March 2023.
- For TAH, reference price will reflect Thursday's closing price instead of Friday's.

5.3 TRADING DATA REFERENTIAL FILES

Please see below the complete list of the referential files that will be available during the Go-Live Weekend both on EFS and CFTS for the **Optiq Trading Platform**.

Although the test will be executed on a Saturday, clients should be aware that the date on the filename will reflect the date of Monday, so for example the Block standing data file will be named: OptiqMDG_Production _CashStandingDataFile_Block_20230327.xml.

This logic is true for all files that are published for the Go-Live Weekend. This will help retrieve the files quicker.

You will see the below Referential Files in the following folders:

Block:

- OptiqMDG_Production_CashStandingDataFile_Block_yyyymmdd.xml
- OptiqMDG_Production_TimeTableFile_Block_yyyymmdd.xml
- OptiqMDG_Production_AuthorizedPriceFluctuationFile_Block_yyyymmdd.xml
- OptiqMDG_Production_SBETeamplate_Block_yyyymmdd.xml

Current:

- OptiqMDG_Production_MemberMappingFile_ALL_yyymmdd.xml
- OptiqMDG_Production_CashTickSizeReferentialFile_ALL_yyyymmdd.xml
- OptiqMDG_Production_RepoSettlementPriceFile_ALL_yyyymmdd.xml

Equities:

- OptiqMDG_Production_CashStandingDataFile_Equities_yyymmdd.xml
- OptiqMDG_Production_AuthorizedPriceFluctuationFile_Equities_yyyymmdd.xml
- OptiqMDG_Production_TimeTableFile_Equities_yyyymmdd.xml
- OptiqMDG_Production_PrevDayCapAndVolTradFile_yyyymmdd.xml

FixedIncome:

- OptiqMDG_Production_CashStandingDataFile_FixedIncome_yyyymmdd.xml
- OptiqMDG_Production_AuthorizedPriceFluctuationFile_FixedIncome_yyyymmdd.xml
- OptiqMDG_Production_TimeTableFile_FixedIncome_yyyymmdd.xml
- OptiqMDG_Production_PrevDayCapAndVolTradFile_FixedIncome_yyyymmdd.xml

Funds:

- OptiqMDG_Production_CashStandingDataFile_Funds_yyymmdd.xml
- OptiqMDG_Production_AuthorizedPriceFluctuationFile_Funds_yyyymmdd.xml
- OptiqMDG_Production_PrevDayCapAndVolTradFile_Funds_yyyymmdd.xml
- OptiqMDG_Production_TimeTableFile_Funds_yyyymmdd.xml

Warrants And Certificates:

- OptiqMDG_Production_CashStandingDataFile_WarrantsAndCertificates_yyyymmdd.xml
- OptiqMDG_Production_AuthorizedPriceFluctuationFile_WarrantsAndCertificates_yyyymm dd.xml
- OptiqMDG_Production_TimeTableFile_ WarrantsAndCertificates _yyyymmdd.xml
- OptiqMDG_Production_PrevDayCapAndVolTradFile_WarrantsAndCertificates _yyyymmdd.xml

5.4 ROLL-BACK OF CLIENT APPLICATIONS

Depending on the Go or No-Go clients either need to keep their applications in line with Optiq or to switch it back to the software compatible with Millennium IT.

Roll back after the Go-Live Week-End in case of a Go

After the Go-Live Weekend, **clients must purge the data that is generated on the Go-Live Weekend test**. It is important that clients do not synchronise their order book with data from the Go-Live Weekend.

Roll back after the Go-Live Week-End in case of a No-Go

In the unlikely event of a No-Go decision after the Go-Live Week-End, customers are expected to roll back their applications and data back to Friday at close of the Trading Day (24 March 2023) for the Borsa Italiana Equity and ETF markets.

Contingency Schedule – to be only used in the unlikely event of a No-Go decision

TIME CET	DESCRIPTION OF SCHEDULE IN THE UNLIKELY EVENT OF A NO-GO	EQT	ETF	BLK
16:30	Confirmation of the No-Go decision for the 27 of March In the unlikely event of a No-Go decision, clients should go back to their Friday 24 March set-up to be ready for the Trading Session on 27 March. The confirmation will be communicated via Euronext Market Status and with the publication of an Info-Flash.			
16:30 - 17:30	 Roll-back to Millennium system Euronext will roll back Borsa Italiana Equity and ETF markets to the Millennium system. Clients must roll back their internal Production systems to the state of Friday 24 March 2022 evening often the and of the trading session in 	\checkmark	\checkmark	\checkmark
	Friday 24 March 2023 evening after the end of the trading session in Millennium			

5.5 MARKETS TIMETABLES

We remind all clients that **new markets timetables will be applicable as of 20 March for Euronext legacy markets and as of 27 March for Italian markets**. For more details, please refer to the Appendix of this document.

APPENDIX

Please see below the technical details needed to connect to the Optiq Trading Platform.

Order Entry Gateway Production Environment

Optiq Segment Name	Partition ID	IP of Individual Partition
Equities	10	212.107.95.2
	11	212.107.95.5
	12	212.107.95.8
	13	212.107.95.11
Funds (ETFs)	20	212.107.95.14
Fixed Income (Bonds)	30	212.107.95.20
Warrants and Certificates	40	212.107.95.23
	41	212.107.95.47
Block	140	212.107.95.60

Please review the <u>Euronext Cash and Derivatives Markets Optiq OEG Service - Interface</u> <u>Specification - External - v5.16.1</u> for details on the Unicast IP addresses.

Market Data Gateway Production Environment

	FEED A	FEED B
Rendez-vous Point (RP) for Colocation	212.107.67.240	212.107.67.241
Rendez-vous Point (RP) for CMC	212.107.67.248	212.107.67.249
Primary IP Address	212.107.93.0/24	212.107.94.0/24
Secondary IP Address	212.107.93.0/24	212.107.94.0/24
Channel ID 1(n)xxx Real-Time	224.0.208.0/24	224.0.209.0/24
Channel ID 2(n)xxx Snapshot	224.0.210.0/24	224.0.211.0/24

Please review the <u>Euronext Cash and Derivatives Markets – Optiq MDG Production Connectivity</u> <u>- External - v5.18.0</u> for details on the Multicast IP addresses.

Euronext Applications Production environment

	IP address	DNS
EFS Internet Access	212.107.68.129	https://efsweb-prod.euronext.com
EFS on Euronext network 212.107.67.1		https://efsoptiq-prod.euronext.com
CFTS on Euronext network	212.107.67.2	cftsoptiq-prod.euronext.com
CFTS Internet Access	Cloud IP addresses are dynamic	sftp.cfts.prodnr.euronext.cloud
TCS Web	212.107.68.134	https://tcs-prod.euronext.com

Session timetables Optiq Cash equities and ETFs on book services (as of 20 March for legacy Euronext clients and 27 March for Italian clients)

Equities:

Trading cycle pattern for Euronext Milan, Euronext Growth Milan, BITGEM, Euronext MIV Milan

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

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading cycle pattern for Euronext MIV Milan

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

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading cycle pattern for Euronext Milan, Euronext Growth Milan, Euronext MIV Milan

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

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

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

Trading cycle pattern for Euronext Milan, Euronext Growth Milan, Euronext MIV Milan

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Trading After Hours:

Trading cycle pattern for Euronext TAH Milan

Phase	Phase qualifier Trading period		From	То
Closed	No qualifier	Opening	06:30	07:30
Uncrossing	No qualifier	Closing	18:00 (1)	18:00 (1)
Continuous	Random uncrossing	ing Standard 1		20:30 (1)
Closed	No qualifier	Closing	20:30	20:59
Closed (2)	No qualifier	Closing	20:59	21:15
Inaccessible	Inaccessible	Closing	21:15	End of service

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

ETF:

Trading cycle pattern for ETPPlus

Phase	Phase qualifier	Trading period	From	То
Closed	No qualifier	Opening	06:30	07:30
Call	No qualifier	Opening	07:30	09:04 (1)
Uncrossing	Random uncrossing	Opening	09:04 (1)	09:04 (1)
Continuous	Random uncrossing	Standard	09:04 (1)	17:30
Call	No qualifier	Closing	17:30	17:35 (1)
Uncrossing	Random uncrossing	Closing	17:35 (1)	17:35 (1)
Continuous	Trading at Last and Random uncrossing	Closing	17:35 (1)	17:40
Closed	No qualifier	Closing	17:40	17:45
Closed (2)	No qualifier	Closing	17:45	18:00
Inaccessible	Inaccessible	Closing	18:00	End of service

(1) With 30 seconds random period.

(2) Dissemination of the closing reference price (calculated and disseminated at the start of this phase).

Session timetables – TCS

Off book services (as of 20 March for legacy Euronext clients and 27 March for Italian clients)

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

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

In Session:

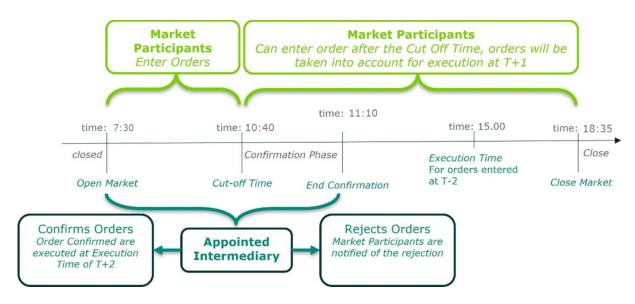
In session phase runs from the pre-opening (7.30 am CET) until the last 'closed' phase of the related trading group ("Book State" = 2 (Closed) and "Trading Period" = 3 (Closing)).

Out of sessions:

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

ATFund (as of 20 March for legacy Euronext clients and 27 March for Italian clients)

Trading Cycles are shown in the below picture:



Some further details below:

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

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

Borsa Italiana instrument			Mnemon ic	Euronext	Legacy inst	rument
ISIN	Category	Instrument	shared	ISIN	Category	Instrument
IE000HMSHYJ6	ETF	ELECTRIC VEHICLE CHARG INFRAST UCITS ETF	ELEC	FR0000031023	EQUITY	ELEC.STRAS BOURG
IE000V6NHO66	ETF	TABULA EUR HY PARIS CLIMAT UCITS ETF EUR	THEP	FR0013333432	EQUITY	THERMADOR GROUPE
IE00BLSN7P11	ETF	UBS S&P 500 ESG ELITE UCITS ETF USD A	SPEL	FR0000053944	EQUITY	FONCIERE VOLTA
IE00BMGRZP89	ACTIVE ETF	SATURNA SUST ESG HANZERO ACC UCITS ETF	SESG	LU0088087324	EQUITY	SES
IE00BZ048462	ETF	ISHARES \$ FLOATING	FLTR	IE00BWT6H894	EQUITY	FLUTTER ENTERTAIN

List of Borsa Italiana instruments sharing a MNEMONIC with another instrument:

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		RATE UCITS ETF USD				
IT0003492391	ORDINAR Y SHARES	DIASORIN	DIA	US78467X1090	ETF	SPDR DJIA TRUST
LU2194447293	ETF	BNPP ECPI GLB ESG BLUE ECONOMY UCITS ETF	OCEAN	NO0010914641	EQUITY	OCEAN GEOLOOP
NL0013995087	ORDINAR Y SHARES	CEMENTIR HOLDING	CEM	LU1681041544	ETF	AMUNDI ETF EUR MID
JE00B4PDKD43	ETC	WISDOMTREE COPPER - EUR DAILY HEDGED	ECOP*	NL0011923057	INDEX	EURONEXT COP 50 EW
IE00BYVJRR92	ETF	ISHARES MSCI USA SRI UCITS ETF USD ACC	SUAS	FR0013506862	BOND	SCHNE1%9A PR2027
LU1974695790	ETF	UBS USD EM IG ESG DIV BOND UCITS ETF A	EMIG	BE0002393651	BOND	ESMEEGFRN 250CT60

CONTACTS

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

Team	Contact details			
Optiq Migration Team Clients' first point of contact during the Go- Live Weekend. Technical & functional assistance with testing on Optiq. Assistance with conformance tests, timeline and customer readiness checklist.	 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 			
Connectivity Clients' point of contact for connectivity matters related to the Borsa Italiana migration onto Optiq.	 Iteland +355 1 6174 289 UK +44 207 660 8585 Netherlands +31 20 721 9585 Email: <u>Optiqmigration@euronext.com</u> 			
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)	 Tel: +39 02 72426964 Borsa Italiana Email: <u>BIt-Membership@euronext.com</u> Euronext Email: <u>EuronextMembership@euronext.com</u> 			
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).	 Email: <u>market-access@euronext.com</u> 			