



WEBINAR: Borsa Italiana Migration to Euronext Optiq®

Phase 3 Client Readiness: Testing, CDRs, Go-Live



EURONEXT

24 January 2024

COUNTDOWN TO PHASE 3 GO-LIVE IS ON!

23

open working days

**Before 1st Customer
Dress Rehearsal (CDR)**
(24 February)

33

open working days

**Before 2nd Customer
Dress Rehearsal**
(9 March)

44

open working days

Before Phase 3*
migration to Optiq
for Borsa Italiana
market
(25 March)

** Borsa Italiana IDEM Market*

The Borsa Italiana migration onto Optiq and related changes are subject to regulatory approval

Agenda

- 1. TIMELINE REMINDER AND REMAINING MILESTONES**
- 2. TESTING: FUNCTIONAL, CONFORMANCE & FRONT-TO-BACK TESTS**
- 3. CUSTOMER DRESS REHEARSALS**
- 4. INSTRUMENTS LISTING IN PRODUCTION**
- 5. MEMBERSHIP AND TECHNICAL FREEZE**
- 6. OTHER RELEVANT PROJECTS**
- 7. Q&A**

SPEAKERS



Ayham Nseir

Head of Euronext
Market Services (EMS)



Flavio Ravotto

Head of Client Project
Management



Roberto Fumagalli

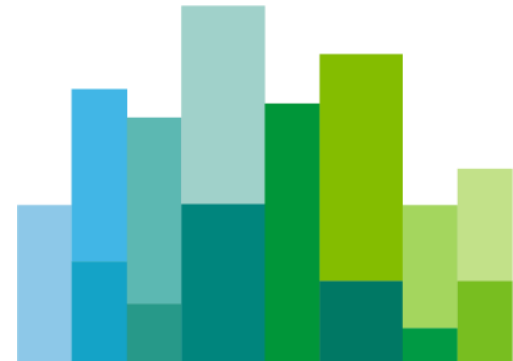
Manager, Client
Relationship Management



Stefania Faiella

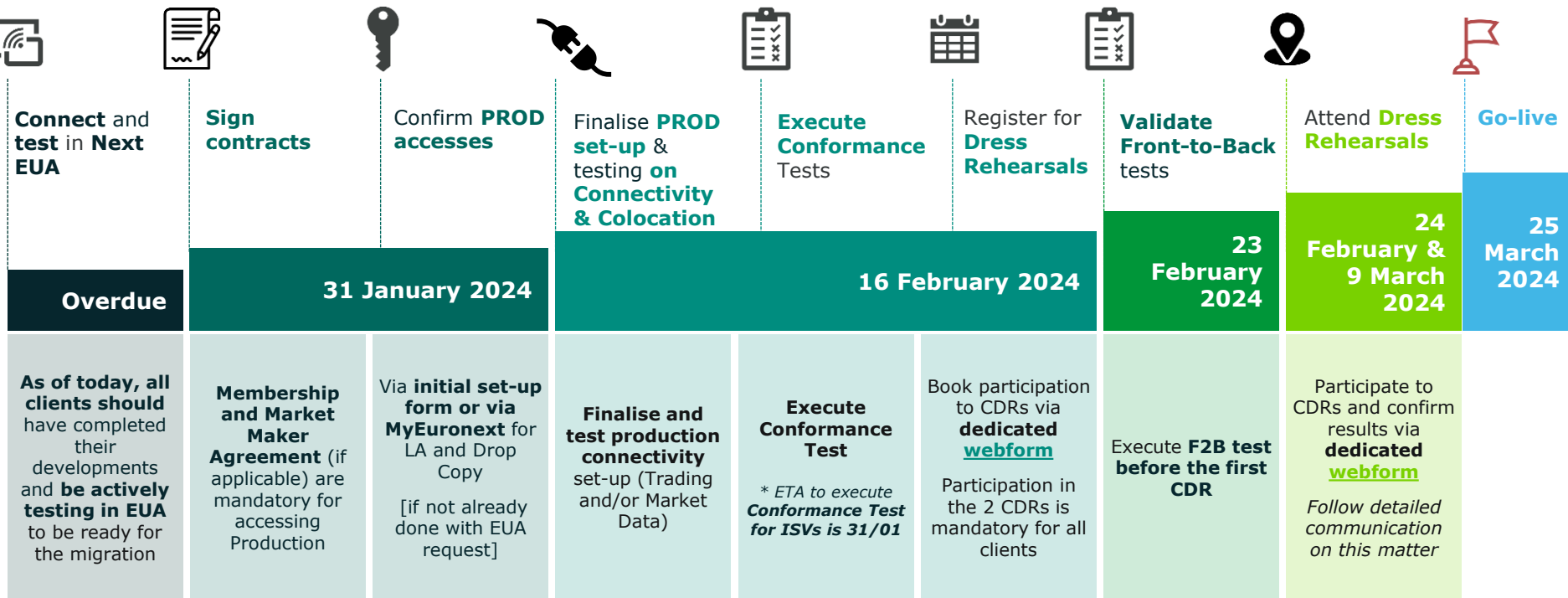
Head of Italy Derivatives

1. Timeline Reminder and Remaining Milestones



Next steps for Phase 3

Clients should follow the below steps within the shared timeframe to secure their readiness for Phase 3.



All external specifications required for client Phase 3 developments and related conformance guidelines are available to clients

2. Testing: Functional, Conformance & Front-to-Back tests



Overview: Clients Testing in Next EUA for Phase 3

Clients impacted by the go-live of Phase 3 should execute their development and/or testing in Next EUA

All the different tests should be completed before the first Dress Rehearsal (24 February)

Note:

Completion of the test(s) should be confirmed by the client through **dedicated webforms**

	Clients not yet connected to Optiq	Clients connected to Optiq	
		Trading on Borsa Italiana markets*	Trading on legacy markets only
Functional Tests	✓	✓	✓
Conformance test	✓ Full	✓	✓
High Availability	✓	✓	✓
Market Data Gateway	✓	✓	✓ <small>If new channels subscribed</small>
Throttling	✓	✓	✗
★ Front-to-Back / Clearing Testing	✓	✓	✓
SLC/Transaction Reporting	✓	✓	✗

Customer Dress Rehearsals

✓ Mandatory
 ✓ Strongly Recommended
 ✗ Optional or N/A
 ★ Point of attention

* Common clients, including clients that migrated during Phase 1 or 2 of BITA migration

The Borsa Italiana migration onto Optiq and related changes are subject to regulatory approval

Conformance and Self-Certification overview

WHAT?

Ensure clients' applications are properly set up and can receive messages with no impact on the Trading chain

3 types depending on the client and related set-up:

Conformance
(full / partial)

Light Conformance

Self-certification

WHEN?

For ISVs: to book ASAP and to complete before 31 Jan

For Trading Members: to book before 31 Jan and to complete before 16 Feb

Mandatory to participate to the first Customer Dress Rehearsal

WHO?

- ✓ **Members developing in-house** trading applications
- ✓ **Software Vendors / ISVs**
- ✓ **Members** not developing in-house solution and using software provided by ISVs

Conformance Test documentation and scripts are already available on the Connect website

Note: Next EUA is closed for weekly maintenance on Wednesdays until 14:00 CET

The Borsa Italiana migration onto Optiq and related changes are subject to regulatory approval

Prerequisites for conformance and self-certification

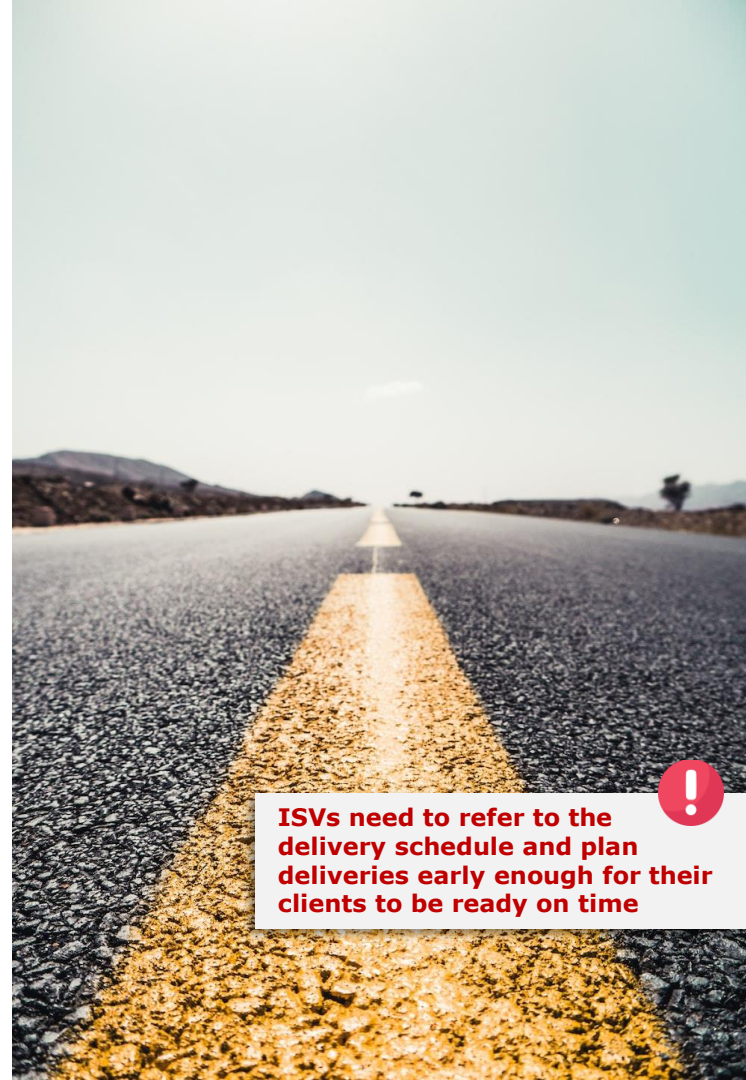
Before taking the test, all clients are asked to:

- **Connect in Next EUA with success**
- **Complete developments** (when applicable)
- **Perform full regression testing of trading activity on IDEM market in Next EUA**



Minimum SBE Version required depends on the features the client has implemented/is using in Production.

For both CDR1 and CDR2, Euronext OEG and MDG will be on SBE template version 331. Clients can use any of the earlier versions of SBE as long as their application is backward/forward compatible in accordance with the Euronext Backward Compatibility Rules.



ISVs need to refer to the delivery schedule and plan deliveries early enough for their clients to be ready on time



Conformance Test (full or partial)



With a Euronext Analyst

SCOPE

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

MANDATORY FOR



Member Firms developing in-house trading software that either are not yet connected to Optiq or are **subject to a major release** within the migration of Borsa Italiana markets to Optiq



ISVs not yet connected to Optiq or subject to a major release within the migration of Borsa Italiana markets to Optiq



Member Firms developing in-house trading software and ISVs already connected to Optiq that develop new features for the migration (**Partial Test**)

ACTIONS REQUIRED

1

Book conformance

Via the dedicated [Webform](#)

- *ISVs: ASAP*
- *Trading Members: 31/01*

2

Return the conformance report complete

Populated with the functionalities that will be implemented

Before the execution of the test

3

Execute test

Partially autonomously
Partially with a Euronext analyst (depending on the functionalities)

- *ISVs: 31/01*
- *Trading Members: 16/02*

4

Confirmation of validation sent to client

Light Conformance Test



With a Euronext Analyst

SCOPE

Confirm the Client Application is working as expected when interacting with Optiq OEG. This is coordinated with an Analyst and dedicated to Members not yet connected to Optiq

MANDATORY FOR



Member Firms not yet connected to Optiq and who use a third-party software

ACTIONS REQUIRED

1

Book the test

Via the dedicated [Webform](#)

• Trading Members: 31 Jan

2

Execute & Validate test

Test is executed and validated in coordination with a Euronext Analyst

• Trading Members: 16 Feb

4

Confirmation of validation sent to client

Self-certification



Done fully autonomously

SCOPE

Confirm the Client Application is working as expected when interacting with Optiq OEG

MANDATORY FOR

- Member Firms who are already connected to Optiq and use a third party's trading software**
- Member Firms who are already connected to Optiq and use an in-house trading software but do not implement new features and are not subject to a new release** in the context of the migration of Borsa Italiana markets to Optiq
- ISVs already connected to Optiq who do not implement new features and are not subject to a new release** in the context of the migration of Borsa Italiana markets to Optiq

ACTIONS REQUIRED

1

Execute test

N/A

- *ISVs: ASAP*
- *Trading Members: 16 Feb*

2

Validate test

Via the dedicated [Webform](#)

- *ISVs: 31 Jan*
- *Trading Members: 16 Feb*

Front-to-Back and Clearing test



Done fully autonomously

SCOPE

- **Reconciliation** of Trades executed on IDEM between Trading and Clearing.
- Check that **information** sent from **Trading to Clearing** are correctly received (*see following slide*)
- **Testing of all relevant Clearing operations** (e.g. trade allocation, give-up, etc.) and in general test that **Clearing is working correctly when IDEM moves to Optiq**

MANDATORY FOR



All member firms trading on IDEM markets regardless of whether they are already connected to Optiq

Member Firms are asked to perform their Front-to-Back tests for **all their applications** used for trading purposes



ISVs are expected to support their clients during front-to-back testing

ACTIONS REQUIRED

1

Execute test

N/A

23 Feb 2024

2

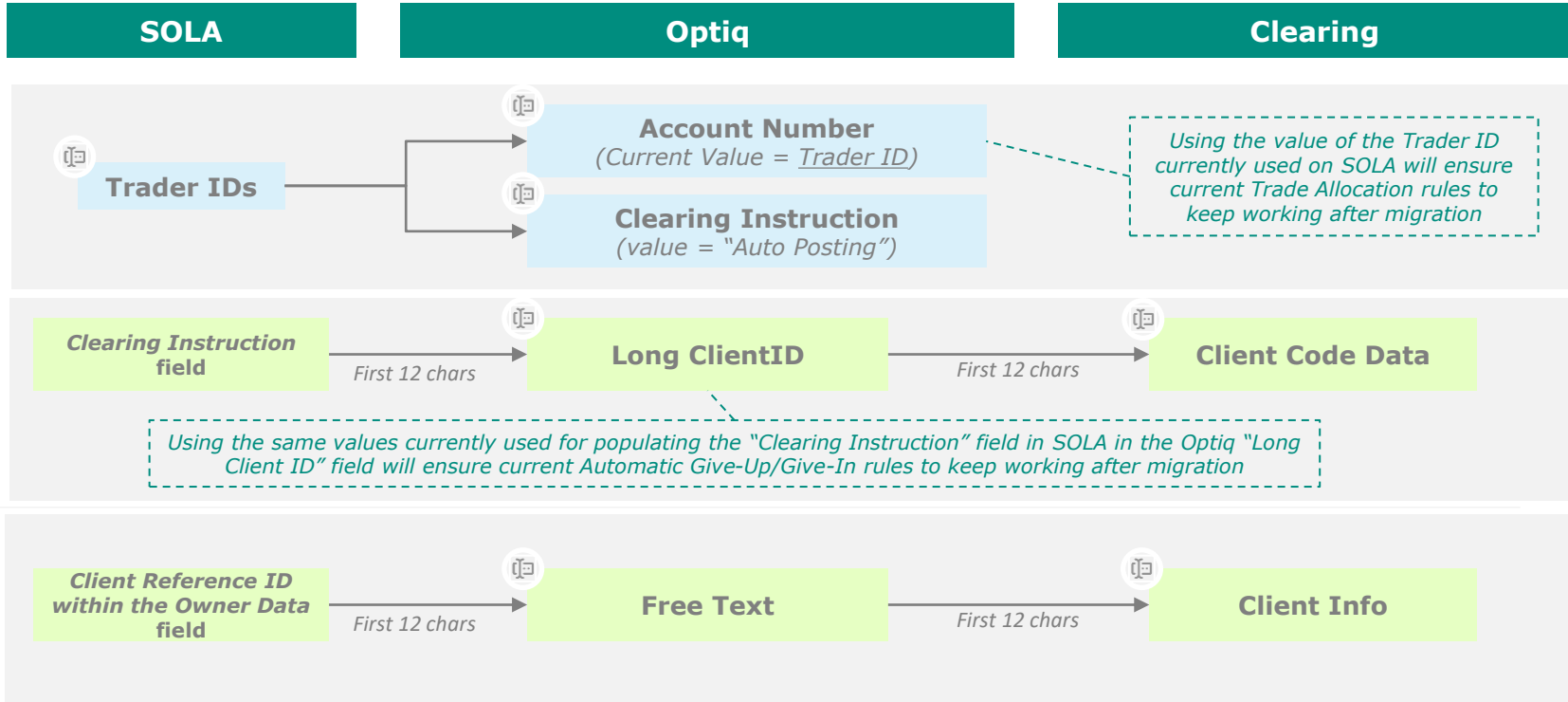
Validate test

Via the dedicated [Webform](#)

23 Feb 2024

Information from Trading to Clearing

Clients are warmly invited to test how the information flow goes from **Trading to Clearing**



Product Codes

IDEM Product Code format has changed on Optiq to harmonise with other Euronext Derivatives markets. However, the **Product Codes will not change on Clearing side** (current Product Codes will be kept) to minimise impacts:

SOLA



SOLA Product Code

Will disappear with the Optiq Migration

Examples:

- American SO on Stellantis is **STLA**
- FIB index is **FIB**

Optiq



OPTIQ Product Code

Different from the SOLA Product Codes (in terms of format and content)

Examples:

- American SO on Stellantis is **STL**
- FIB index is **FIB**

Clearing



Clearing Product Code

Will keep the Product Codes currently visible within the Clearing systems

Examples:

- American SO on Stellantis is **STLA**
- FIB index is **FTMIB**

Product Codes

- ❑ The Mapping between the current **Product Codes** used on SOLA and the new ones that will be used on Optiq has been made available on the [Optiq Migration Connect web page](#) (including the ones used on Clearing)
- ❑ **Clients are warmly invited to test any related impact on their Trading to Clearing chain and adapt accordingly**
- ❑ **ISIN is the common key** to be used to identify instruments throughout the entire chain (trading and clearing) for trades and positions. Example: Future MIB Expiry June 2024, same ISIN code through the entire chain = IT0019741070

Clearing and BCS for IDEM

Overview of BCS and IDEM Clearing Services changes post migration to Optiq

Not changing

BCS (GUI and API) will not be impacted by any change within the IDEM migration to Optiq for Phase 3 Migration

- The **Clearing System** and **CCP (Euronext Clearing)** currently in use for IDEM **will not be impacted by any change** within the IDEM migration to Optiq
- Clients may continue to apply the same procedures they currently have in place for clearing operations without any impact

Changing

- **BCS service (GUI and API) will change IP addresses as follow** (effective from IDEM Go-Live on Optiq on 25 March 2024):

Environment	Server	IP Address
Production	Server 01	212.107.67.4
	Server 02	212.107.67.5
DR	Server 01	212.107.67.100
	Server 02	212.107.67.101
Test	Server 01	212.107.67.20

- ❑ Connectivity (Telnet) test towards new Production IPs addresses is already available, **clients are warmly invited to test Connectivity as soon as possible**
- ❑ **Logon to new Production IPs addresses will be available and mandatory during CDRs**

Functional test webforms




Webforms must be completed and submitted to validate the tests taken autonomously. They can be found on Connect.

TESTS	DESCRIPTION	WEBFORMS	DEADLINES
Conformance test or Self-certification	Validate that the Optiq protocol is correctly implemented and compliant with Euronext guidelines	Conformance booking form Self-certification form	ISVs: 31 January Trading Members: 16 February
High Availability	Validate correct management of Optiq failover	HA validation form	ISVs: 31 January Trading Members: 16 February
Market Data Gateway (MDG) and MDG Lite Multicast	Validate the correct reception and handling of the EUA multicast data on the Borsa Italiana channels	MDG Multicast validation form	
MDG Light (Unicast)	Validate the MDG Lite Unicast services	MDG Unicast validation form	
Throttling	Validate the throttling feature on Optiq for clients that are not familiar with the software	Throttling validation form	
Front-to-back	Validate that the Front-To-Back reconciliation is working as expected on Optiq	Front-to-back validation form	
Saturn Reporting & SLC	Validate the upload of Short Long Codes onto the Euronext Saturn Application	Saturn validation form	

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New MM roles and schemes for IDEM products

Harmonisation with Euronext Derivatives framework, with some local features

	Market Maker Agreement (MMA)	Market Maker Scheme (MMS)	Market Maker Extended (MME)
	<i>MM performing a MM strategy as per MiFID II (replacing current MiFID2 MM)</i>	<i>Voluntary Market Maker (replacing current PMM and DMM)</i>	<i>Voluntary Market Maker (replacing current EMM)</i>
IDEM products⁽¹⁾	All products	All products	FIB, MINI, MICRO only
Orders vs. quotes and orders	Orders only	FIB, MINI, MICRO: orders only All other products: orders and quotes	Orders only
Quotation period (CET)	FIB, MINI, MICRO: 08:00 - 22:00 All other products: 09:01 - 17:30	FIB, MINI, MICRO: 08:00 - 17:30 (<i>daily session only</i>) All other products: 09:01 - 17:30	17:30 - 22:00 (<i>evening session only</i>)
% number of series in the NTM area^{(2),(3)}	MIBO, WMIBO: 10% (<i>with a min of 10 series</i>) SO, WSO: 50% or 10% depending on underlying (<i>with a min of 8 series</i>)	MIBO, WMIBO: 10% (<i>with a min of 10 series</i>) SO, WSO: 50% or 10% depending on underlying (<i>with a min of 8 series</i>)	n.a.
Quote size, spread class and required maturities	Depending on product / underlying	Depending on product / underlying	Depending on product
Presence time⁽⁴⁾	All products: 50%	FIB, MINI, MICRO: 70% (<i>daily session only</i>) MCAP, MIBO, WMIBO: 70% FDIV, SF, SDF, SO, WSO: 60%	70% (<i>evening session only</i>)
Relaxed obligations during SMC⁽⁵⁾			
Account type	Market Maker (LP)	Market Maker (LP)	Market Maker (LP)

⁽¹⁾ LP, RMM and Specialist decommissioned. ⁽²⁾ Number of series per each required maturity included in the "Time To Expiry" (TTE). ⁽³⁾ Per each required maturity, series to be quoted in the NTM area can be i) non-consecutive and ii) non-symmetric. ⁽⁴⁾ % duration of continuous trading phase for which quoting obligations must be met. ⁽⁵⁾ Halved quantities and doubled spreads.

Features related to CA management

CA Policy

- A **single Corporate Actions (CA) Policy** will be adopted at the Euronext Derivatives group level, with a few specificities⁽¹⁾
- Moreover, following market consultation, **some fine-tunings to CA management** of IDEM products will be implemented at go live in view of harmonisation:
 - Removal of the early exercise suspension on the day before a CA event or the ex-dividend date of the underlying share
 - Reduction from 90% to 50%+1 (or 75% in case of a mandatory takeover bid, as per current regulations) of the threshold of equity investment held by the bidder for the purpose of closing and settlement of derivative contracts, within takeover bids or exchange on the underlying

CA counter

- Numeric field (0, 1, 2, 3, etc.) which is added to each tradable instrument and which represents the # of times each series has been subjected to a CA during its lifetime (available in both Reference Instrument market data feed and Standing Data file)
- IDEM: it will be activated at Phase 3 go-live and populated based on the number of times each migrated series has been adjusted at migration date to keep consistency (never adjusted before =>0, adjusted once =>1, adjusted twice =>2, etc.)
- Euronext legacy: it has been initialised at zero since Nov2

Ad hoc Product Codes

- For some IDEM products to be migrated, ad hoc Product Codes will be created to fit the need of series with different lot sizes within the same expiry
- Series associated to ad hoc Product Codes will exist until their expiry, therefore they may be subject to a CA after migration; however, no new series will be created on ad hoc Product Codes
- After migration, CA management on IDEM products will be harmonised with the Optiq CA procedures, therefore i) in case of a CA, the lot size will be modified for all the existing series, up to and including the furthest expiry with open interest; ii) new series created after a CA adjustment will inherit the lot size of the relevant expiry; iii) adjusted series will have the CA counter increased (no ad hoc Product Codes)

ISIN codes

- Starting from Phase 3 go-live, IDEM products will no longer change the ISIN codes of adjusted series following a CA; therefore, the ISIN codes of each series "before" and "after" a CA will be the same

Special AMR

- For those IDEM series with a strike price of more than 5 digits (integer + decimals) to be migrated on Optiq, Special Derivatives Instrument Trading Code (AMR) will be created⁽²⁾

⁽¹⁾ For example, if a Ratio CA will result in a lot size that is a multiple of the standard lot size (e.g. 200 with standard lot size of 100), then: i) on EN legacy markets, the position will be multiplied (e.g. by 2 in previous example) while the lot size will remain the same; ii) on IDEM market, the lot size will be multiplied while the position will remain the same. ⁽²⁾ The list of IDEM series assigned Special AMR will be provided in due course.

3. Customer Dress Rehearsals



Customer Dress Rehearsal (CDR) overview



Dates

- 1st CDR: **24 Feb 2024**
- 2nd CDR: **9 March 2024**

Further Testing might be planned during the Go-Live weekend (TBC)



Mandatory participants



Trading Members



ASPs and ESPs



Data Vendors

Clients are asked participate in both Dress Rehearsals

Note: ISVs should support their clients during CDRs



Objectives

- Test new Production set-up and network in the live environment
- Validate clients' configuration (Logical Access set-up, Market Making config, etc.) and related access to services and applications
- Execute a test under real conditions before the go-live



Executed in Production environment

Mandatory pre-requisites for Dress Rehearsals

- Conformance test (Full/partial/Light) and/or Self-certification test** passed with success
Trading Members **ISVs** **ASPs**
- Production Logical Accesses** requested (incl. drop copy)
Trading Members
- Connectivity to Production set-up & tested (Telnet incl. to Disaster Recovery)**
Trading Members **ASPs** **ESPs** **Data Vendors**
- Production Market Data channels** ordered, and Market Data feed (heartbeats) tested in Production
Trading Members **ASPs** **ESPs** **Data Vendors**

All relevant contracts must be signed before accessing Production 

Important information on Dress Rehearsals



REGISTRATION

Clients must register for both Dress Rehearsals and Go-Live at the same time using the [registration form](#) on Connect website.



CRITICAL DATES

	Register by	Participate on
1st Customer Dress Rehearsal	9 February 2024	24 February 2024
2nd Customer Dress Rehearsal	26 February 2024	9 March 2024
Go-Live	11 March 2024	25 March 2024

Clients are required to confirm that they participated by submitting the [webform](#) straight after the CDR.



Detailed Dress Rehearsals schedules and guidance
will be communicated in due course, be mindful of Info-Flashes!

Dress Rehearsals scope and high-level guidelines



General

Log on with all Logical Accesses, all Firm IDs, all types of connectivity and segments clients are a member of

Trading

- Enter orders
- For LPs, send quotes on all Phase 3 instruments on which they are LP
- Purge the order book and roll back their applications at the end of the day

Market Data

- Check the correct reception of market data messages

Files transfer

- Download Standing Data Files via CFTS

Clearing and BCS

- Connect to BCS service (GUI and API) using the new IPs

Markets in scope for Dress Rehearsals

	Euronext platform Optiq
Borsa Italiana Markets	Phase 1 and Phase 2 markets
Euronext Legacy Markets	All markets, all locations

- Front-to-Back testing
- Saturn
- Connect to Disaster Recovery site



4. Instruments Listing in Production environment



Italian instruments in Production

Instruments' visibility on Optiq

At the time of their creation, the instruments will be **suspended** and only visible in:

the Referential files
(Standing Data files)

Market status change message

Instruments' availability

Until the migration, Italian Phase 3 instruments will only be:

- tradeable on the current Borsa Italiana platform (i.e. not available for trading on Optiq Production)
- made available for Trading on Optiq during the Customer Dress Rehearsals

For the Customer Dress Rehearsals (CDRs): instruments currently tradable on Borsa Italiana (Milan) Phase 3 markets will be technically created in the Optiq Production environment

Management of a corporate event



Replication of the existing characteristics at the date of the instrument creation in the Optiq Production platform

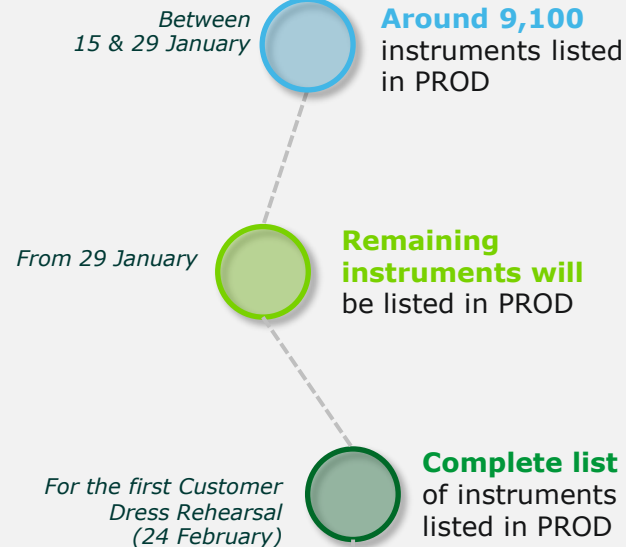


Adjustment of the instruments for go-live based on the corporate events that have taken place



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Indicative timeline



5. Membership and Technical Freeze



Membership and technical freeze

	Freeze pre Go-Live	Freeze post Go-Live
Membership extension or new membership	18 March 2024	1 April 2024
Change of set-up on IDEM market	11 March 2024	1 April 2024
Change of set-up on Legacy markets	21 March 2024	26 March 2024

Changes can only be considered if onboarding is in progress and client is **already involved in Phase 3 readiness incl. testing**. In that case, onboarding must be **fully completed before the first CDR** (by 24 February 2024)

	Freeze pre Go-Live	Freeze post Go-Live
Listing of IDEM Derivatives instruments	18 March 2024	1 April 2024

6. Other Relevant Projects



Clearing Migration Project

Derivatives migration

Contractual
package
completion



EUA opening

27 November 23



Start End-to-End testing

as of
18 March 24



Commodities
Customer Dress
Rehearsal⁽¹⁾

20 April 24



Financial Derivatives
Customer Dress
Rehearsal⁽¹⁾

4 May 24



Go-live
Commodities⁽²⁾

10 June 24



Go-live Financial
Derivatives ⁽²⁾

1 July 24

...

Testing
(available until Go-Live)

- ✓ Connectivity tests
- ✓ Functional tests
- ✓ End-to-end tests

Incremental testing
acceptance with test book

*Date of Italian markets
migration onto the new
Euronext Clearing system
of ENX Clearing will be
communicated in due
course.*

Note: ⁽¹⁾Clients (Clearing Member Firms) participation is mandatory
⁽²⁾A communication will be sent to confirm the migration date after the
internal decision process and the approval from the Regulators

Euronext Mid-Point Match

Dates

- **EUA:** 31/01/2024
- **Webinar:**
 - ✓ **Sell side:** 05/02/2024
 - ✓ **Buy side:** 06/02/2024
- **Go-Live:** end of March (pending Regulatory Approval)

Scope

- Equity Optiq Segment
- Instruments having Euronext as Primary Market
- Operating under Reference Price & Large In Scale Waivers

Offering

- Mid-Point execution pool based on the Best Bid and Offer of the Euronext Central Limit Order Book (COB)
- Dark to Lit Sweep Functionality available

Dark Order processing

- Pure Dark Orders interact with Dark Order Book (DOB) only
- With *Sweep*, Dark Orders interact first with Dark Order Book and then entered in Lit Order Book (LOB) as standard Limit or Market orders

Dark Order entry checks

- Order Type: Mid-point Peg (*Sweep* orders can be Market or Limit, when interacting with the Dark Order Book – before *Sweep* – they are managed as Mid-point Peg)
- Order Validity: Day, IOC and FOK (+ GTC/GTD for *Sweep* orders)
- Price checked against Order Price Control Collars

Request for Cross (RFC) Enhancements

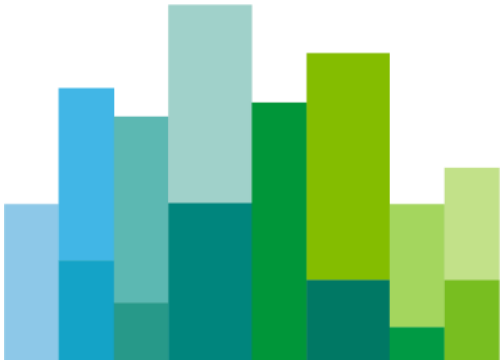
RFC request on instrument with existing RFC period in progress

- Currently, when the RFC initiator submits a request on an instrument where an RFC period is already ongoing, this second RFC is queued pending the completion of the ongoing RFC request
- With the new behaviour, Optiq will reject a new RFC request with a dedicated error code

Autojoin Functionality

- Within the current RFC mechanism, during the RFC Response Period, the RFC initiator cannot improve its own price
- With the introduction of the Autojoin functionality, the RFC initiator will be allowed to follow potential price movement offered by the RFC reactors
- It is important to highlight that the feature is:
 - ✓ optional and configurable at Contract level
 - ✓ available only for Client Best Execution RFC mechanism
 - ✓ only applicable for Client vs House and RO vs House Account Type combinations (between the two legs of the RFC)

Reminder of Supporting Channels and Documentation



Borsa Italiana Migration Support

Online library and Euronext teams are here to support clients' readiness throughout the migration.

Clients are invited to subscribe to Info-Flashes and Operational Notices to make sure they have the most up-to-date information.

Technical documentation (specifications)

Information to **develop and implement** Optiq®, Saturn and any other features and related changes

Info Flashes

Notification of key milestones, changes, availability of documentation or reminders of deadlines

Operational Notices

Detailed migration **updates** to inform the market of specific milestones and updates

Guidelines

Migration plan and detailed milestones, timelines and readiness checklists (customer journey)

Webinar slides

Reminders of and focus on key milestones of the migration

FOR FURTHER SUPPORT RELATED TO BORSA ITALIANA MIGRATION TO OPTIQ:

- **Optiq Migration Desk:**
Optiqmigration@euronext.com
+33 1 8514 8585
+39 02 4541 1399
- Optiq Migration pages:
 - connect2.euronext.com/member-ship/projects/bita-optiq-migration
 - www.borsaitaliana.it/borsaitaliana/gestione-mercato/optiq/migration.htm
- You can also contact your Sales representative



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Questions & Answers session



If there is not enough time to answer your questions, we will get back to you following the presentation. Thank you!



Obrigado **Dank Je** **Merci** **Grazie** **Takk** ***Thank You***

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