

Speakers



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Agenda

- 1. INTRODUCTION, TIMELINE, CLIENT ENGAGEMENT & FEEDBACK
- 2. MIGRATION GUIDELINES & PRINCIPLES
- 3. ONBOARDING & CLIENT READINESS MAIN MILESTONES
- 4. COMMUNICATION & NEXT STEPS
- 5. Q&A



1. Introduction





Migration timeline update

As currently anticipated

Phases

Optiq® upgrades for clients Along with trading on legacy markets project's delivery Cash: Equities (incl. MIV market) 27 March 2023 and ETF Cash: Warrants & Certificates, Date will be Fixed Income and other Cash communicated in markets (including EuroTLX) due course Date will be **Financial Derivatives, Energy** communicated in Commodities due course

- Changes impacting legacy Euronext markets for the migration of Italian markets onto Optiq will progressively be implemented in EUA and Production until the go live
- Two (2) mandatory External Dress
 Rehearsals per go-live week-end will take
 place (anticipated dates on 25 February
 2023 and 11 March 2023 for phase 1 –
 will be confirmed in due course)



What is the Borsa Italiana migration about?

From a systems and connectivity perspective

Optiq Trading System



Borsa Italiana's trading systems migration from the Millennium Exchange and SOLA systems to the Euronext Optiq® platform, which lead to changes impacting all Euronext markets

New digital portals



Acceleration of Euronext's Digital Ambition Programme (MyEuronext), i.e.:

- Deployment of **Euronext's Member Portal** as a replacement of Borsa Italiana's current ones
- Generalisation of the Issuer Portal bonds, warrants & certificates and ETFs/funds

New file systems



New file transfer system (EFS, EOD, ...) available to all Euronext's members based on two (2) protocols: SFTP* and **HTTPS** (new)

Regulatory reporting solution



New Transaction Reporting and SLC (Short Long Code) Management services for Borsa Italiana clients through **Saturn**, Euronext Global Reporting tool

Connectivity



All Borsa Italiana clients need to get (direct or indirect through Service Providers) **connectivity to Aruba IT3**, Euronext's Primary Data Centre in Bergamo, and Disaster Recovery in France



REMINDER

For all Euronext
Trading Members
and Service
Providers

.....

All the changes led by the migration are described in the Guide to Trading System

Information available on Euronext & Borsa Italiana websites



Client Engagement Update

Starting from March 2022, a first round of client engagement meetings were held to get feedback on the migration as communicated up to date

Migration timeline

No major concerns raised

- Euronext to consider appropriate time is given to clients to get ready and take into consideration other exchanges' dates
- Point of attention during the transition period where underlyings and derivatives will be traded from different data centres
- ⇒ Euronext key priority is to keep the communication channel open with regular updates

Functional changes

- Some specific changes raised questions i.e.
 - RFE model (Structured Products)
 - RFQ model (ETF & Fixed Income)
 - TVTIC format change
 - RiskGuard extension
 - Market Making scheme
- ⇒ Deep-dive sessions, Functional User Groups aimed at addressing those specific points are being planned (session on Structured Products took place on 17 May)

Connectivity

- Positive feedback on connectivity harmonisation
- Migration of colocation for Italian clients critical for client readiness
- Great interest in the TCPcompressed market data feed from clients on Italian markets only

⇒ Clients are recommended to contact their Account Manager to discuss connectivity options as quickly as possible



2. Migration Guidelines & Principles





Euronext project delivery model

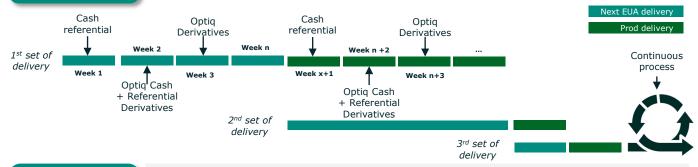
In order to improve our capacity of execution and enhance the delivery of major programmes such as the Borsa Italiana migration onto Optiq, Euronext will follow these 3 principles for release management:

1. Delivery of functionalities split by services

Any functional change will be delivered in a so-called "train principle" i.e. a smart delivery of small "pieces" every 3 to 10 weeks. Classical length of a train is 4 to 5 weeks, meaning 4 to 5 weeks of EUA opening

2. Services delivered via a specific sequence

Features will be delivered by "service" following a specific applicative delivery sequence starting with Cash and ending with Derivatives. This **sequence will be done in EUA and then in PROD** as showed below. The same process will be repeated for all services of the feature.



3. Reduced impact in production

Introduction of the "Activation/Deactivation strategy": first deliveries of a service means that clients may see changes implied by a functionality even if this one is yet to be delivered (activated) in EUA or Production - leveraging on the backward/forward compatibility mechanisms whenever possible. Deliveries requiring mandatory modifications will be regrouped to minimize clients impacts.





Leading to continuous delivery for client trading on Euronext's legacy markets - focus on phase 1

To mitigate operational risks and ensure client's are benefiting from functionalities as soon as delivered, Euronext will perform progressive upgrades prior to go-live starting on:

- 27 July in EUA
- 12 September in Production

New version of the SBE template (version 316) for Order Entry & Market Data

- External specifications will be updated along with the project deliveries
- Operational notices will provide details about nature of the changes, expected tests for clients, SBE impacts

Clients that do not wish to support new features embedded in new versions can continue to use former SBE versions provided that their applications manage Euronext backward/forward compatibility rules



1st batch

of external specifications covering changes from June to August in EUA



July



2nd and 3rd (tbc) batch

of external specifications covering changes from August to October in EUA



August

September



3rd or 4th (tbc) batch

of external specifications

covering changing post-October

November

Example of services delivered:

- Self Trade Prevention Enhancements
 - Member portal Logical Access
 - Trade Unique Identifier¹

- Pre-Trade risk controls (RiskGuard) enhancements²
 - CFTS for EOD, EFS, ... files³
 - Random Uncrossing for Cash
- Trading capacity control enhancements

- Public distribution features
- Quantity and national value controls at order entry
 - Take over Bid IPO
- Member Portal for MM/LP Registration (tbc)



Some of the major Optiq® upgrades in 2022

For clients trading Euronext legacy markets

New TVTIC working as a unique Trade Identifier for trades across the whole trading chain

New Euronext

Files transfer

protocol

Phase 2 Imple

Phase 1

- Implementation in Saturn & TCS
- New TVTIC to replace the current one

Optiq Central Order Book

implementation (SBE & FIX)

EUA Delivery		
Cash	Derivatives	
27 July 2022	3 Aug 2022	
28 Sep	5 Oct	

2022

ELIA Dolivory

CFTS (Common File Transfer System)

- Standing data files:7 Sep 2022
- Other Services:7 Dec 2022

2022

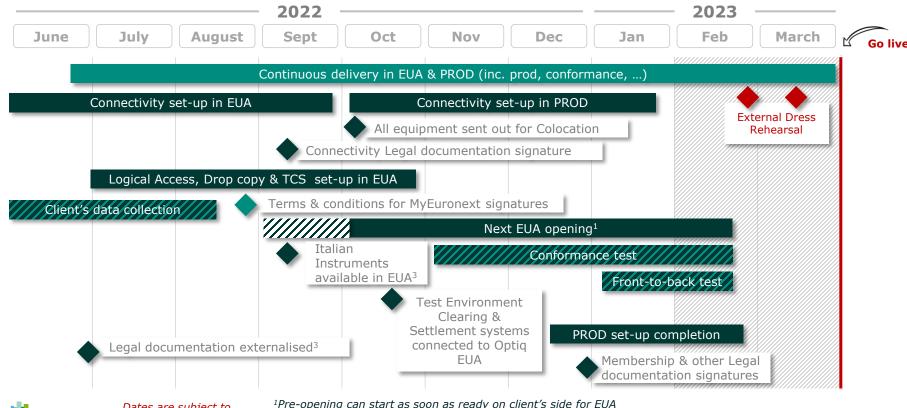
Production Delivery	
Cash	Derivatives
12 Sep	19 Sep
2022	2022
14 Nov	21 Nov
2022	2022

Dates TBD, parallel run with previous infrastructure being maintained until after phase 1 Go-Live



Please note that a dedicated User Group is being planned in the coming weeks to provide clients with full technical details on changes impacting clients on Euronext's legacy markets at first

Indicative roadmap for Phase 1: Cash Equities & ETF with a Go-Live on 27 March





³ Membership & Data documentation

² Progressive feeding of the systems

Short Long Code (SLC) Management

CURRENTLY

Done via the **Borsa Italiana Member Portal**



POST-MIGRATION

of the market

Available via **Saturn** (as per all other legacy Euronext markets)

During the migration

Clients will have to upload their MiFID II Short Long Codes from two different systems:

- Member Portal for markets still on the legacy Italian platforms
- Saturn for markets that have already moved to Optiq

After the migration

Following the sequence of the programme's phases, Members will use Saturn to upload their MIFID II Short Long Code





- A Web service allowing manual upload of CSV files, manual input, corrections...
- Offering a REST API over HTTPs
- With a secured access

Transaction Reporting for non-MiFID Firms on Italian markets

CURRENTLY

Available via the **Borsa Italiana sFTP/Unavista**solution



POST-MIGRATION

of all markets

Available via **Saturn** (as per all other legacy Euronext markets)

During the migration

After the last steps of the migration (Italian Derivatives Markets) Transaction Reporting for non-MiFID Firms on Italian markets will remain via the Borsa Italiana **sFTP/Unavista Transation** Reporting solution

The service will move to Saturn:

- Non-MiFID Firms already connected to Saturn for Transaction Reporting will leverage on existing setup and just start reporting for XMIL MIC Code
- Other Non-MiFID Firms will have to perform proper set-up and testing prior the go-live



Commodity Derivatives Position Reporting

CURRENTLY

Done via the **Borsa Italiana Member Portal**



POST-MIGRATION

of the market

Available via **Saturn** (as per all other legacy Euronext markets)

During the migration of Phases 2 & 3

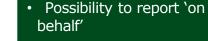
Clients will have to start using Saturn together with the migration of each Commodities market to Optiq:

- for SeDeX and Cert-X together with the Step 2 of the migration
- for **IDEX** together with the Step 3 of the migration

After the migration

All Members will use Saturn to manage their Position Reporting on Italian Commodities Derivatives





• For derivatives, positions should be reported as Gross

MyEuronext Member Portal

CURRENTLY

Membership and market access activities are managed for Italian markets via a dedicated Member portal

On Legacy Euronext Markets, Connect website and forms are supporting these processes



POST-MIGRATION

progressive upgrades before and after migraton

MyEuronext will become the only and official platform for **all** Euronext markets

During the migration

- During the transition period, clients will have to use MyEuronext,
 Connect & BITA member portal following the various steps of the deliveries
- **For all phases,** Logical Access in Production (inc. Drop copy) will be requested via **MyEuronext** (same for EUA for phase 2 & 3)

After the last steps of the migration

- Progressively, all Membership and market access activities will be managed via MyEuronext.
- Borsa Italiana Member Portal will remain available for management of current membership and market access activities not yet available onto MyEuronext





A **webinar** will be organised to support and train customers onboarding on **MyEuronext**

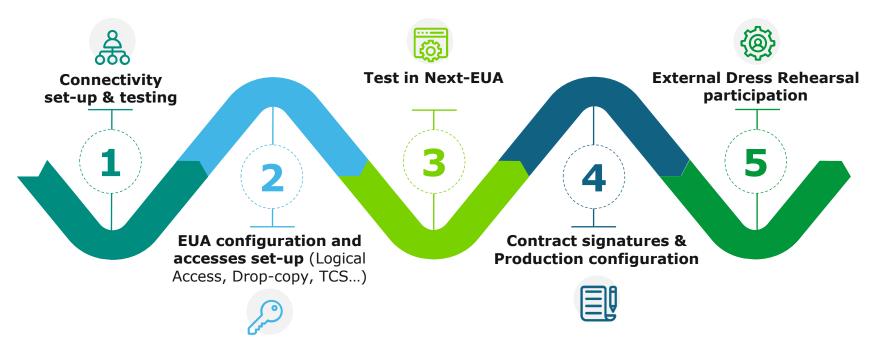
3. Onboarding & client operational readiness process



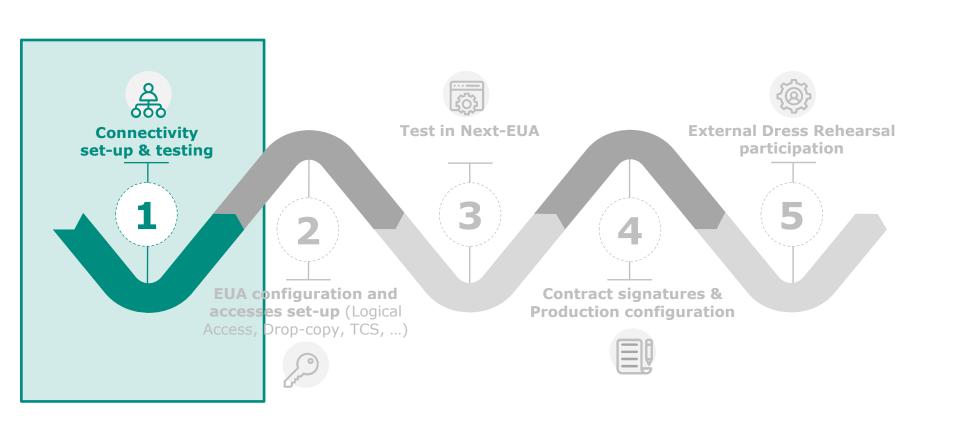


Steps of the migration

Applicable to all phases of the migration







Connectivity to Optiq

CLIENTS ALREADY CONNECTED TO OPTIQ

Should be able to leverage on their current connectivity

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

NON-COLOCATION CLIENTS NOT YET CONNECTED TO OPTIQ

Should assess whether they can leverage their current connection to Borsa Italiana

- Select and subscribe to Market Data option(s)/packs (e.g. MDG vs. MDG lite)
- 2. Verify the availability of the chosen option(s) with your vendors
- 3. Evaluate the bandwidth requirement and (if needed) start the bandwidth upgrade process as soon as possible

Euronext will provide all guidance to clients





MDG vs. MDG Lite

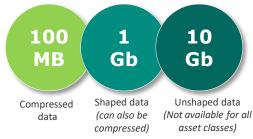
Two different tailored Market Data models

MDG 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)

Customer bandwidth available per pack

Additionally, three (3) customer bandwidths options per pack:



MDG Lite

- A TCP-compressed version of MDG that offers market data with reduced bandwidth usage (and higher latency)
- Provided in addition to Optiq MDG for Italian markets only
- Bandwidth depending on number of connections

MDG Lite additional Market Data Packs

- Best 10 level of market by order
- Best 10 level of market by limit

Specifications

By the end of June 2022

EUA Delivery

Available in September 2022

Go-Live

Together with Migration Step 1



Clients currently connected via LSEG Backbone

Connectivity to Italian markets via the LSEG will be discontinued by mid-September 2022

- All clients have been contacted to find and set up alternative connectivity options i.e.
 - BINet and Borsa Italiana CMC
 - Euronext London PoPs (InterXion, Slough LD4) and Aruba IT3
 - From Aruba IT3 Colocation
- Migration to the chosen new connectivity solution should now be completed by clients ASAP
- ⇒ Euronext will provide guidance on the migration process
- ⇒ Clients are invited to contact Euronext clients support for follow up and support





Colocation in Aruba IT3 Data Centre

Clients (1) currently using the Borsa Italiana colocation facility, (2) considering having presence in colocation for the migration, should set-up their infrastructure in the Aruba IT3 Data Centre

Connectivity during the migration period

- From the current Borsa Italiana co-location hall Optiq EUA & production platform
- From the Aruba co-location hall and current Borsa Italiana legacy CDS and production platforms

Critical next steps

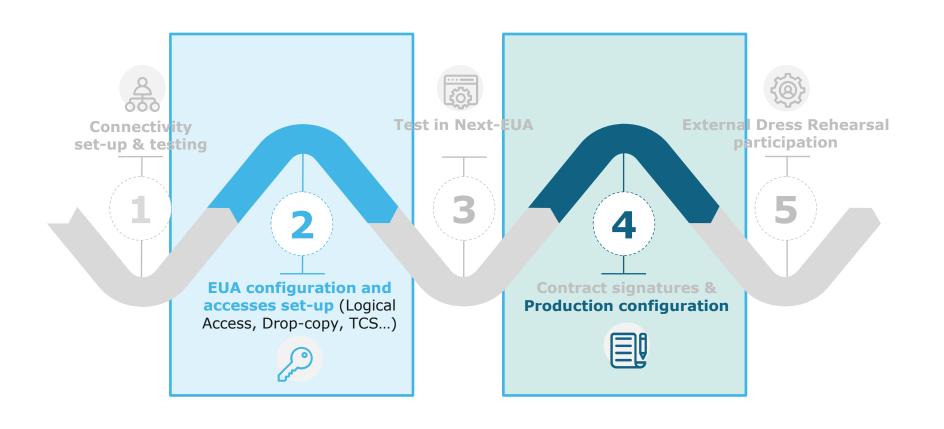
- Prepare, complete the order form and review associated legal documentation* - Members willing to have presence through a Provider are recommended to liaise with such provider asap
- 2. Order equipment (cabinets, FTEx, internal cross-connects, time services)
- 3. Order connectivity to the Data Centre
- 4. Ship and install equipment
- 5. Perform installation and administrative tests

Clients of the
Italian Equity
and/or ETF
segments should
have colocation
space ready for
the 1st Customer
Dress Rehearsal of
the 1st migration
step



* Full documentation available on Euronext Data Centre | euronext.com page

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

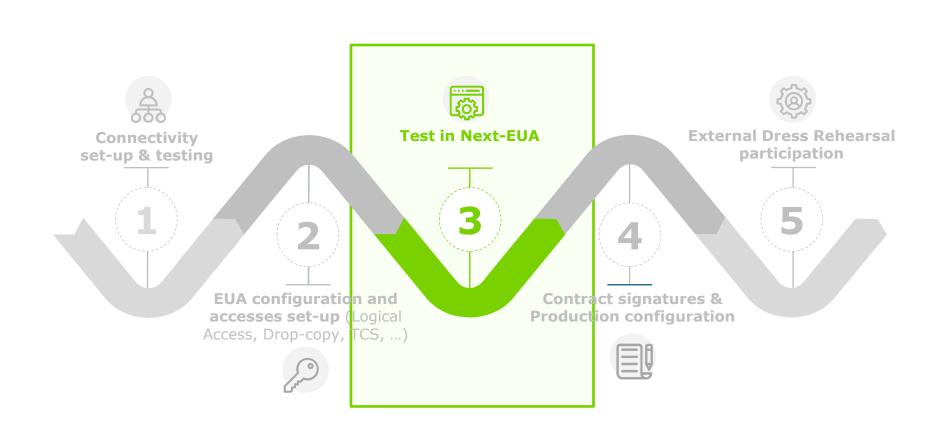


Access set-up

For clients not yet connected to Optiq and clients already connected to Optiq trading on Italian markets







Testing to execute in EUA

√ Mandatory / √ Recommended / × Optional or N/A

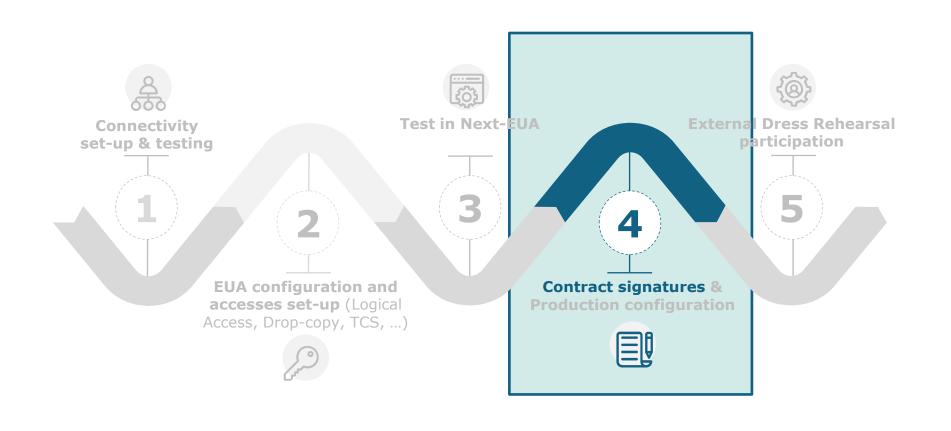
Client connected to Optiq

- _3___
- End-to-End tests will mainly take place in Optiq EUA environment (Next-EUA) and will need to be performed by all clients as shown is the table
- For some of them, success of the test(s) will need to be confirmed by the client through dedicated webforms



Client not





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Legal documents management (1/2)

For **Trading Members**

No access to Production will be granted before clients have signed all contracts relevant to their activities (MyEuronext Terms & Conditions need to be signed before accessing to the portal)

- Membership and Market Data legal documentation will be published end of lune*
 - => Clients should start legal review as soon as documents are available
- Borsa Italiana Membership and Euronext Market Access teams will liaise with clients to:
 - Address any specific question
 - Lead and support clients' signature of agreements

(TPAA) with order form1

Trading Platform Access Agreement

Membership application Form



¹Euronext legacy markets will be notified of the amendments







Clients not yet connected to Optiq and trading on Italian markets



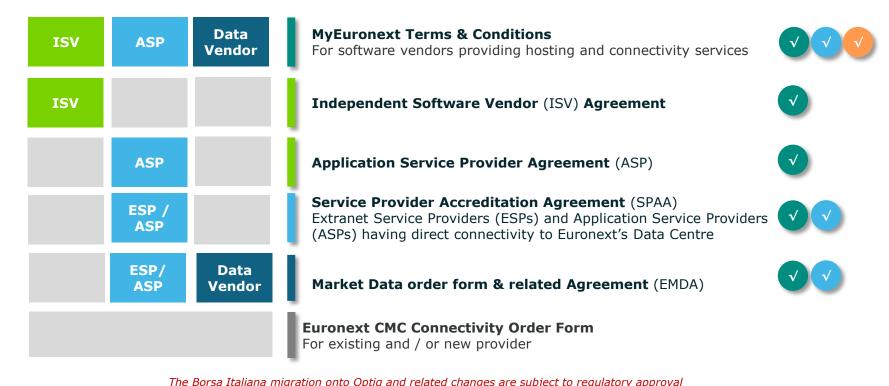
Market Data EMDA (inc. Order Form)1 Market Maker and Liquidity Provider Terms & Conditions Regulatory Reporting Solution Registration Form MyEuronext Terms & Conditions TCS & Saturn Clearing Facility Agreement RiskGuard Agreements & SOA Connectivity legal documentation³

² RiskGuard => Clients interested in RiskGuard related services (incl. Sponsored Access)

³ In the case of change of connectivity set-up

Legal documents management (2/2)

For **Service Providers**











4. Communication & next steps





Communication principles, related documentation and deliveries

External specifications



Info Flash/Service Announcements

informing about key milestones



Operational notices informing about high level technical changes on projects



Technical document (i.e. external specifications) detailing information on how to develop and implement Optiq®, TCS and Saturn features





Full details of the current Optiq® platform already available within the technical documentations on the Euronext website

Subscription to Info Flashes and Operational Notices can be done through the **Connect Portal**. Clients are invited to subscribe to the above-mentioned notifications and regularly consult the list of documents shared in the IT-Documentation section on Connect.

- As mentioned, specifications externalisation is split into **batches** to facilitate clients' review
- Every single batch of external specifications is associated with:
 - a SBE version number
 - a set of corresponding Specifications documents
- External Specifications will be updated along with the projects deliveries, new versions and nature of the changes will be announced via operational notices
- For BITA clients moving to Optiq: many Optiq features are already available in Optiq EUA, such as:
 - Request for Quote
 - current implementation of RiskGuard Services & Pre-Trade risk controls
 - RFE model for W&C.
 - ...



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Client Readiness

Euronext will support all clients from their onboarding to their full readiness



Functional and technical User groups



Migration guidelines before end of June with guidance on how the migration plan will be rolled out

June 2022

Webinar dedicated to changes on Legacy Euronext Markets (TVTIC, CFTS, ...)



One-to-One meetings and deep dive sessions when requested by clients

July 2022

Webinar dedicated to the new RFQ mechanism



September 2022

Webinar dedicated to the TCS functionality & Block trading

Webinars have been and will be organised throughout 2022 and 2023 to keep clients updated about project timelines and progress

04 2022

Next Optiq migration update Webinar



The Optiq Migration Support Desk will liaise with you on a regular basis to support you in your readiness **FOR FURTHER TNFORMATION ABOUT BORSA ITALIANA MIGRATION TO OPTIO:**

- Optiq Migration Help Desk: Optigmigration@euronext.com +33 1 8514 8585 +39 02 4541 1399
- Optiq Migration page: https://connect2.euronext.com/en /membership/projects/bita-optiqmigration
- You can also contact your Sales representative





5. 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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