

Speakers



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Agenda

- 1. INTRODUCTION AND TIMELINE
- 2. HIGH-LEVEL OVERVIEW OF FUNCTIONAL SCOPE
- 3. PHASE 3 SERVICES DELIVERY PLAN
- 4. ONBOARDING & CLIENT OPERATIONAL READINESS JOURNEY
- 5. DOCUMENTATION AND COMMUNICATION
- **6.** OTHER RELEVANT PROJECTS
- 7. Q&A



1. Introduction





Migration timeline reminder and update

As currently anticipated

Phases



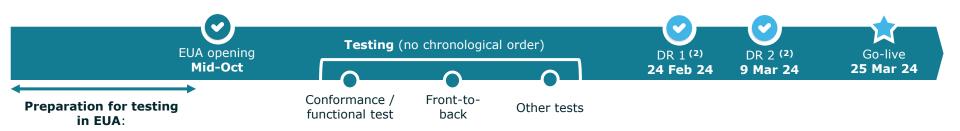
- Changes impacting legacy Euronext markets for the migration of Italian markets onto Optiq will progressively be implemented in EUA and Production until the Go-Live
- 2 mandatory Customer Dress Rehearsals will take place before the Go-Live, on 24 February and 9 March 2024

AGREX and IDEX segments are out of scope for the Phase 3 of the Borsa Italiana migration to Optiq (and will cease consequently)



Migration timeline reminder

Phase 3: Financial Derivatives



- Manage accesses via Initial set-up form
- ✓ Start developments
- ✓ Complete and sign connectivity Order Form

READINESS

In parallel

Clients should complete the onboarding process to prepare their readiness for Production:

- ✓ Signature of Contracts
- √ Connectivity set-up installation
- ✓ Testing

(1) Optional service

(2) Customer Dress Rehearsals are executed in Production environment



2. High-level Overview of Functional Scope





Change impacting only IDEM market
Implementation of current SOLA

Optig® Im

Implementation of current SOLA feature on Optig for IDEM market only



Change impacting legacy Euronext derivatives markets

Order types and validity time

Optig® Stop orders

- introduction of stop market and stop limit, with trigger price configurable as the last trade price only
- two validity types specified in the order entry message: i) for the un-triggered stop (Day, GTD or GTC) and ii) for the order that results from the stop order being triggered (Day, GTD or GTC)
- available during the call phase, do not participate to the uncrossing but can be triggered by a validated call price
- Market orders
 - not available in call phase
 - unexecuted quantity automatically cancelled by the system
- Good Till Cancel (GTC) and Good Till Date (GTD)
 - max duration: 365 days for GTC and 364 days for GTD

Trading hours (see next slide)

Introduction of (opening) call phase on all IDEM products

- starting at 7.30 CET (as per Euronext Milan), closing time depending on product
- third step of auction uncrossing algo based on mid-point of the Tradable Price Range
- random uncrossing (
- Alignment of continuous trading closing with Euronext Milan
 - 17.30 CET except for FTSE MIB index futures (closing at 22.00 CET as today)
- **Extended hours for availability of wholesale order functionality on all IDEM products**
 - opening and closing time depending on product and trading day



Focus: IDEM new trading hours

Change impacting only IDEM market

Implementation of current SOLA
feature on Optiq for IDEM market only



Change impacting legacy Euronext derivatives markets

	Time interval (CET time)	IDEM (Equity and Index derivatives)					
Trading phase		FIB, MINI, MICRO	FDIV, MIBO, MCAP	SDF	SF (ITA names)	SF (EU names)	so
(4)	07:30 - 08:00 (8.00.00 - 8.00.30)	×	-	-	-	-	-
Call phase ⁽¹⁾	07:30 - 09:01 (9.01.00 - 9.01.30)	-	х	x	х	х	х
Continuous trading	08:00 - 22:00 (daily session: 08:00 - 17:30) (evening session: 17:30 - 22:00)	х	-	-	-	-	-
	09:01 - 17:30	-	х	х	х	х	х
Wholesale order functionality	07:30 - 22:00	х	-	-	-	-	-
(during normal trading days)	07:30 - 18:30	-	х	х	х	х	х
	07:30 - 09:05	х	х	х	х	-	-
Wholesale order functionality	07.30 - 17:30	-	-	-	-	х	-
(on expiry day)	not available	-	-	-	-	-	х

⁽¹⁾ The end of call phase refers to a randomly selected second between: 8:00:00 - 8:00:30 (FIB, MINI and MICRO), or 9:01:00 -9:01:30 (all other products).



Change impacting only IDEM market Implementation of current SOLA

feature on Optig for IDEM market only

Change impacting legacy Euronext derivatives markets



Market Making

Harmonisation of roles and obligations' framework, while keeping key local specificities with strong market value

- two roles per product (MMA and MMS), except for FTSE MIB futures which also have a dedicated role in evening session (MME)
- some existing roles decommissioned (RMM, LP, Specialist)
- depending on each product⁽¹⁾, fulfilment of obligations using "orders" or "guotes and orders" (including futures
- for those products where quotes are available, MM logical access required to send quotes
- account type "LP" to be used while performing liquidity provision with quotes and/or orders
- some changes to obligations' framework(1) in view of harmonisation (e.g. NTM area moving with the underlying's price during the day (options only), spread tables' set up based on Time to Expiry (TTE) and "Absolute / Percentage / Absolute" parameters)
- enhancements to MM performance reports

Market Maker Protection (MMP)

- two types of protection available at contract level: i) Volume Protection and ii) Delta Protection (options only)
- applicable to both guotes and orders flagged with account type "LP"
- change in management of rounded values for Volume and Delta positions





Strategy trading functionality

- wider range of pre-configured strategies on the same underlying (including delta neutral as options vs. futures only), identified by a trading code and available for both on-book trading (also during call phase) and wholesale transactions
- two implied matching models available for on-book trading and configurable at contract level(1): i) Spontaneous Implied Matching (SIM, which generates bid/offer prices real-time in strategy orderbook, based on best price conditions available in the strategy legs' orderbooks) and ii) Event Driven Implied Matching (EDIM, where a member can insert an order in the strategy orderbook and then request the system (via a dedicated message) to automatically generate an aggressive order based on best prices available in the strategy legs' orderbook)(2)

Exchange-generated calendar spreads on index futures

• first two consecutive calendar spread strategies automatically generated by the trading system⁽³⁾: i) first vs. second expiry, and ii) second vs. third expiry, whose structure is "buy front expiry and sell back expiry"

(1) Details for IDEM products will be provided in due course, (2) SIM implied prices are calculated and available for matching on a permanent basis, while EDIM implied orders are not persistent. (3) Already implemented for legacy Euronext derivatives markets.



Change impacting only IDEM market Implementation of current SOLA

feature on Optig for IDEM market only



Change impacting legacy Euronext derivatives markets

Wholesale trading

Wholesale order functionality

- single order type to replace BTFs, bundle and cross orders
- support for multi-instrument and multi-counterparty transactions (within the same contract)
- transaction ID to be communicated by initiator to reactors to get the negotiated trade executed
- wholesale transaction to be confirmed within a pre-defined time period after reception and validation of the initiator side, otherwise the proposed trade will be automatically deleted
- support for LIS strategy trades (including delta neutral transactions as options vs. futures only)
- size controls configurable in lots only and executed on the initiator side
- transaction price validated when submitted by the initiator against (configurable on a product basis(1)): i) COB Dynamic Collars for each individual instrument on which the transaction relies on, ii) Daily or lifetime High/Low price recorded for each individual instrument on which the transaction relies on, iii) in case of a LIS strategy transaction, individual constituent prices are checked against the overall strategy price submitted based on the strategy formula

Request for Cross functionality (RFC)

- different combinations of Account Type allowed
- two RFC algos configurable at contract level(1), with the possibility to enable COB inclusion: i) Standard RFC algo (no priority is given based on Account Type combination), ii) Client Priority RFC algo (specific priorities apply depending on Account Type combination)
- once RFC initiator submission is checked and accepted, it is communicated to the market via a real-time market message whose content depends on RFC algo configured at contract level
- possibility to configure RFC reactor minimum quantity and to prevent self-trading

Optiq® Controls on Trading Capacities (for Wholesale and RFC)

 combinations of trading capacities for buy / sell legs not allowed in "internal" cross trades: i) DEAL vs. DEAL, ii) DEAL vs. MTCH, iii) MTCH vs. DEAL, iv) MTCH vs. MTCH



⁽¹⁾ Details for IDEM products will be provided in due course.

Change impacting only IDEM market

Optia®

Implementation of current SOLA feature on Optiq for IDEM market only



Change impacting legacy Euronext derivatives markets



Order Mass Cancellation

- applicable to a selected derivatives contract
- possibility to restrict the command to a finer level of granularity⁽¹⁾

Cancel on Disconnect functionality (CoD)

- available at order entry level, for each individual order, based on the content of a specific field ("Execution Instruction")
- by default, quotes are not persistent and are automatically cancelled in case of disconnection

Self-Trade Prevention functionality (STP)

- applicable to orders and quotes (same priority) during continuous phase, not to wholesale, RFC and implied orders
- STP type available at order/quote entry level: i) cancel resting, ii) cancel incoming, iii) cancel both⁽²⁾
- applicable only if two matching orders/quotes (coming from the same Firm ID) have the same STP type, the same STP ID (optional field) and are between accounts i) House vs. House, ii) LP vs. LP, iii) House vs. LP.

RiskGuard services

- available through FIX API and a web-based user interface
- controls set in quantity (number of lots), with different levels of granularity depending on each type of control⁽³⁾
- pre-trade risk controls available: Suspend/Unsuspend ("Kill Switch"), Block/Unblock, Order Size Limit, Maximum Exposure Position (MEP, via FIX API only)

Membership authorisation

- control at order entry level of the coherence between the Trading Capacity⁽⁴⁾ and the Account Type⁽⁵⁾ values and the consistency of these two fields with the Membership Role⁽⁶⁾ of the trading participant⁽⁷⁾
- incoming order rejected in case of combination not allowed

(1) Exchange Market Mechanism (EMM) / buy or sell orders / logical access / Optiq partition / Execution Within Firm Short Code. (2) Already implemented for legacy Euronext derivatives markets. (3) Member Code / Logical Access / Client Identification Short Code / Execution Within Firm Short Code. (4) AOTC / MTCH / DEAL. (5) Client / House / LP. (6) Broker / Dealer / Liquidity Provider. (7) For legacy Euronext derivatives markets, activation date will be agreed with each individual Trading Member.



Change impacting only IDEM market

Optiq® Implementation of current SOLA feature on Optiq for IDEM market only



Change impacting legacy Euronext derivatives markets



• numeric field added in standing data file to identify the number of CA adjustments per instrument(1)

Collar and circuit breakers mechanism

- orders and quotes checked upon entry and execution against Dynamic Collars (DC), applied around a reference price updated dynamically throughout the trading day (Dynamic Collar Reference Price - DCRP) and determined according to different methodologies (depending on product type and market conditions)
- DCRP and multipliers to determine the Collars may be modified intraday by the Exchange depending on market conditions and disseminated at contract level
- enhancements to Trade Price Validation (TPV) and Future Spike Protection (FSP)
- introduction of Future Limit Interruption Protection (FLIP, mutually exclusive with FSP) and Static Collars for futures
- in case of attempt to trade outside of DC, the instrument(s) will be moved into a reservation phase

Open interest dissemination

• once a day for each series, after trading session's end (~22:30 CET) and via a standing data file



• new field (in standing data file and MDG) to support multipliers with decimals, to be used going forward to calculate the ctc size



• new field (in standing data file and MDG) to specify instrument's expiry date and distinguish it from the last trading date

No longer available

Other

changes

Iceberg order, market to limit order and stop order at bid / ask
Real-time alerts disseminated to MM in relation to obligations' fulfilment
Non executing broker
Deferred publication for orders to execute wholesale transactions

FIA Execution Source Code scheme (FIX Tag 1031)

(1) For existing instruments on legacy Euronext derivatives markets, this field will be initialised at "0", while for IDEM instruments it will inherit the existing CA counter at the time of migration.



3. Phase 3 Delivery Plan





Testing opening for Italian IDEM Market



Optiq Test Environment (Next-EUA) available for IDEM Markets as of mid-October 2023 (exact date will be shared in due course)

Clients of the IDEM Market are warmly invited to:

- Perform all enablement & accesses activities
- Complete their software developments and configurations asap
- Start testing on Optiq

Borsa Italiana IDEM instruments available in Optiq Next EUA

- A first subset of Borsa Italiana IDEM instruments will be made available in Optiq Next EUA as of Mid-October 2023 (exact date will be confirmed in due course)
- Euronext will progressively configure additional contracts in Next EUA until end of Oct / Beg of November



First subset of contracts creation with **13 products**, including both Index & Stock Futures/Options Completion of the product creation in EUA with a total of **27 products** (for a total of **40 products**), also including *rectified* instruments

Legacy IDEM Test environments:

- SOLA (Trading) CDS will remain available for clients until the go-live of IDEM on Optiq
- SOLA CDS will be disconnected from Clearing test environment in November (date to be confirmed in due course)



Anticipated SBE deliveries in EUA and Production



The table below presents an overview of the different SBE template upgrades planned until the Go-Live of Phase 3 of the Borsa Italiana Optiq Migration. Note that below dates are indicative and subject to change

Euronext will maintain backward / forward compatibility for all those versions, i.a clients can remain on a previous version of SBE and integrated the changes, clients do not need to be on the latest SBE version for the go live

V. 331 V. 330 V. 329 Next EUA Next EUA D: 24 Jan 2023 V. 328 **Next EUA** D: 13 Dec 2023 C: 31 Jan 2023 Next EUA D: 22 Nov 2023 C: 20 Dec 2023 Euronext Saturn Application: 20 Sep 2023 C: 29 Nov 2023 Derivatives Markets: 27 Sep 2023 **Production** Fixed Income, W&Cs, Block: 4 Oct 2023 **Production** Equities, Funds (ETP): 11 Oct 2023 D: 19 Feb 2024 **Production** D: 22 Jan 2024 C: 26 Feb 2024 Euronext Saturn Application: 13 Nov 2023 Delivery in C: 29 Jan 2024 **Production** Derivatives Markets (D): 20 Nov 2023 with next SBE Cash Markets (C): 27 Nov 2023

C: Cash Markets / D: Derivatives Markets / C(1): Fixed Income, Warrants & Certificates, Block / C(2): Equities, Funds (ETP) / S: Euronext Saturn Application



Delivery of Services with SBE 328 /1

Indicative timeline & SBE version

	Description	IDEM	Legacy Euronext
Membership Authorisation	Validation of combinations of Trading Capacity and the Account Type fields (as implemented on cash markets), activation on Legacy markets with ad hoc one-to-one communications	\checkmark	\checkmark
Corporate Action Counter	Added to static data to identify the number of <i>Corporate Events</i> applied on an instrument	\checkmark	\checkmark
Expiration Date	On IDEM, contracts may have expiration date different from last trading date A new field called Expiration Date in standing data to reflect the above	\checkmark	×
Lot Multiplier	New field added to compute the Contract Size and other data instead of Trading Unit. Backward compatibility ensured for legacy Euronext markets.	\checkmark	\checkmark
Market Maker Protection	Change in management of rounded values for Volume and Delta position	\checkmark	\checkmark



Delivery of Services with SBE 328 /2

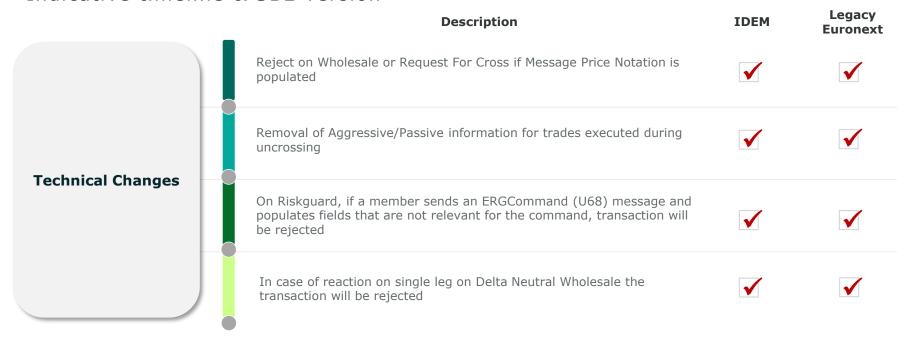
Indicative timeline & SBE version

	Description	IDEM	Legacy Euronext
Automated Market Reference (AMR)	Instrument Trading Code/Automated Market Reference (AMR) format changing to accommodate strike prices with 4 decimals. Not activated at the go-live of SBE 328 but later (date TBC). Clients should note that the new AMR logic will be applied to existing instruments that are already tradeable and instruments that will be introduced with future listings. AMR will be deprecated in the future, Clients are encouraged to move to Symbol Index for instrument identification purposes	√	√
MEP for Derivatives	Riskguard Maximum Exposure Position (MEP) introduced on Optiq Derivatives (only via FIX)	\checkmark	✓
Reconciliation Data Service for Derivatives	Trade List (per Firm ID) will be provided via CFTS to reconcile the executed trades in case of incidents on Optiq derivatives (as already available on Optiq cash)	\checkmark	✓
SLC via Saturn	New fields added (mandatory for non-MiFID Firms)	\checkmark	\checkmark



Delivery of Services with SBE 328 /3

Indicative timeline & SBE version





Delivery of Services with SBE 330

	Description	IDEM	Legacy Euronext		
Deliveries with SBE 329 in EUA and with SBE 330 in Production					
Price Validations & Collars	Enhancements to Trade Price Validation (TPV) and Future Spike Protection (FSP), introduction of Future Limit Interruption Protection (FLIP) and Static Collars	\checkmark	\checkmark		
Activation of Quotes on Futures	Currently Quotes are not enabled on Future. It will be possible to use Quotes on Future products, availability of quotes will be defined productby-product.	\checkmark	×		
Quantity Limits on Calendar Spreads	A control / limit on the Quantity for Calendar Spreads will be introduced	\checkmark	\checkmark		
Delta Neutral with Cash Underlying	On IDEM it will not be possible to enter Delta Neutral with a Cash Underlying (this will remain possible on Euronext Legacy)	\checkmark	×		
Open Interest Dissemination	The Open Interest will be disseminated once a day at $\sim\!22:30$ CET/CEST for IDEM (via dedicated file available on CFTS, no market data)	\checkmark	Under evaluation		
Deliveries with SBE 33	0 in EUA and Production				

Stop Orders Derivatives









Delivery of Services with SBE 331

Indicative timeline & SBE version

Legacy **Description IDEM Euronext** Random Uncrossing before entering Continuous Trading will be **Random Uncrossing** introduced on Optia derivatives for Derivatives Controls on Trading Capacities will be introduced on "Internal" Cross Trades for both Wholesales Orders and Requests for Cross. The following **Controls on Trading** combination of buy/sell legs will be rejected: **Capacity for** ✓ DFAL vs. DFAL Wholesale and RFC ✓ DEAL vs. MTCH ✓ MTCH vs. DFAI ✓ MTCH vs. MTCH

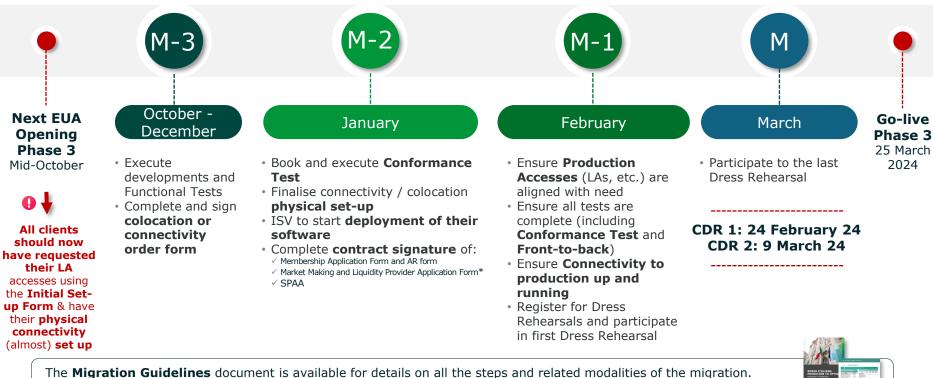


4. Onboarding & client operational readiness journey





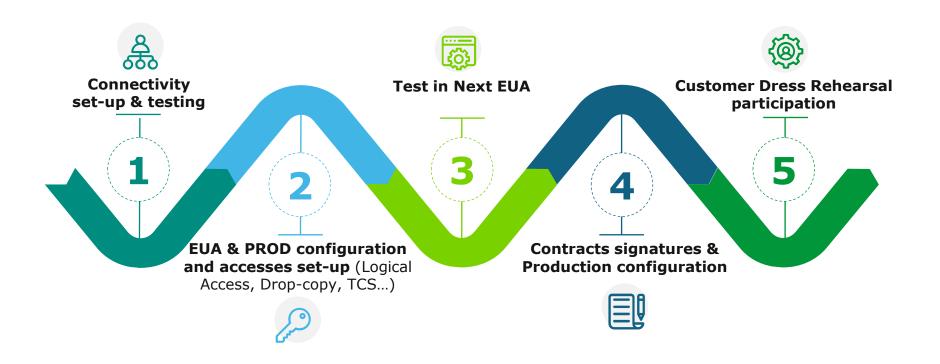
Phase 3: Migration next steps overview



At the end of the document, a checklist is available for clients.



Macro-step view





Connectivity to Optiq

CLIENTS ALREADY CONNECTED TO OPTIQ

Can leverage their current connectivity

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

CLIENTS NOT YET CONNECTED TO OPTIQ

Can leverage their current connection to Borsa Italiana (except Borsa Co-Location) or set up new connectivity

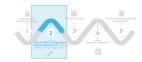
- Select and subscribe to Market Data option(s), e.g. MDG vs. MDG lite, and channels
- Verify the availability of the chosen market data option(s) with your vendors
- 3. Evaluate the bandwidth requirement and (if needed) start the bandwidth upgrade process as soon as possible

Clients that need presence in colocation for the migration, have to set up their infrastructure in the Aruba IT3 Data Centre



Euronext will provide guidance to clients

Segments, Partitions and Logical Accesses



CASH SEGMENTS	Equities	Fixed Income	ETFs & Funds	
	Warrants & certificates	Euronext Block (MTF)		
DERIVATIVES SEGMENTS	Equity Derivatives	Index Derivatives	Commodity Derivatives	
PUBLICATION SEGMENTS	Indices	АРА		
	Euronext FX	Irish Bonds & Funds		

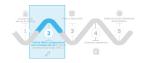
SEGMENTS REPARTITION

- Index Futures and Options traded on IDEM will be added to the Index Derivatives segment (1 partition)
- Stock Futures and Options traded on IDEM will be added to the Equity Derivatives segment (3 partitions)

LOGICAL ACCESS MANAGEMENT

- A Logical Access (LA) represents the access point to one Optiq Segment
- Members should have at least one LA per segment they are trading on
- The same LA can be used to:
 - ✓ Trade on multiple Euronext markets within the same segment
 - √ Connect to all partitions of a segment
- When using Quotes for LP activity, dedicated LP LA(s) are needed
- When acting as LP (via orders or quotes), Account
 Type LP is to be used

Firm IDs and Clearing Information



Clients must have at least one Firm ID to trade on Optiq and may have multiple Firm IDs to segregate their trading activity

Mapping between CED code and Euronext's Firm ID

- Firm IDs are sent to Euronext Clearing (the CCP)
- One or more Logical Accesses can be associated to the same Firm ID
- The same LA can be associated to multiple Firm ID
- Liquidity Provider obligations are set at Firm ID level
- Trade Allocation (on SOLA based on the *Trader IDs*) will rely on the
 Account Number and Clearing Instruction fields already available in
 the Optiq Order Entry; clients should populate the current value of the
 Trader ID value (when required) in the Account Number combined with
 Clearing instruction set to Auto Posting so that existing trade allocation
 rules keep working
 - To note that, together with the Account Number, also Long ClientID and Free Text (in both cases, just the 12 initial chars) will be sent to Clearing



Clients Testing in Next EUA for Phase 3



Next EUA will open Mid-October 2023

By beginning of February, all clients should have finalised their developments & deployed their software

ISVs should deploy software to Member Firms by end of January to let them complete testing on time.

By mid-February, all clients should have completed their tests

Note:

Success of the test(s) must be confirmed by the client through dedicated webforms

	Clients	Clients connected to Optiq			
	not yet connected to Optiq		Trading on legacy markets		
Functional Tests	\checkmark	Along with project deliveries*	Along with project deliveries*		
Conformance test	√ Full	Along with project deliveries*	Along with project deliveries*		
High Availability	\checkmark	✓	√		
Market Data Gateway	\checkmark	\checkmark	If new channels subscribed		
Throttling	\checkmark	\checkmark	×		
Front-to-Back	\checkmark	\checkmark	√		
SLC/Transaction Reporting	✓	\checkmark	×		
	Customer D	ross Pohoarsals			







✓ Mandatory ✓ Strongly Recommended ★ Optional or N/A





Contract signatures – by mid-January

Before *mid-January*

- Sign contracts
- **Return** signed contract to

<u>BIt-Membership@euronext.com</u> OR <u>Optiqmigration@euronext.com</u> depending on the contracts

List of contracts to be signed:

- ✓ Membership Application Form even if already signed for Phase 1 or 2
- ✓ Market Making and Liquidity Provider Application Form (if applicable)
- ✓ SPAA

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



5. Documentation and Communication





Documentation and support on Client Readiness

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

Documentation



Info-Flash and **Operational notices informing** about key milestones, technical changes, services deliveries and external specifications updates



Technical document (i.e. external specifications) information to develop and implement Optiq® and Saturn features

<u>Migration guidelines</u> with guidance on how the migration plan will be rolled out



<u>Guide to Trading System</u> with information on functional changes - new version coming soon!

How the Market works with functional details - new version coming soon!

Communication and support



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



Webinars to keep clients updated about project timelines and progress



The Optiq Migration Support Desk liaising with you on a regular basis to support you in your readiness

FOR FURTHER INFORMATION ABOUT BORSA ITALIANA MIGRATION TO OPTIQ:

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



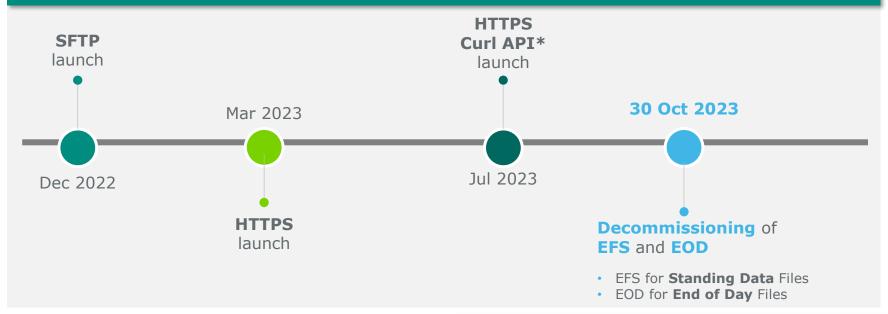
6. Other Relevant Projects





EFS and EOD decommissioning

Clients who do not have **access to CFTS** yet are invited to get onboarded as soon as possible and to start planning the migration from EFS and EOD to CFTS as it will be decommissioned end of October

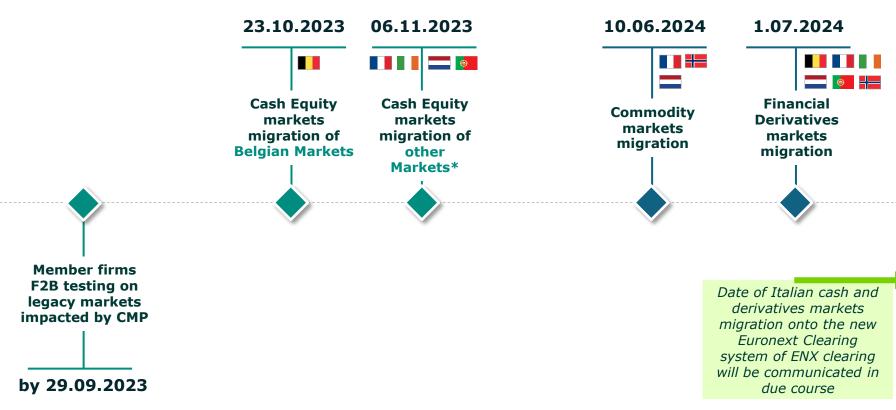


^{*}HTTPS Curl API is provided for backward compatibility to facilitate the transition, but clients are warmly suggested to move to SFTP for automatic interaction with CFTS as this is the target protocol.

Clients are reminded that to get access to CFTS it is mandatory to get onboarded on **MyEuronext** first by signing the MyEuronext Terms & Conditions



Clearing Migration Project





*Olso is out of scope



7. 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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