

Euronext Clearing migration

Frequently Asked Questions

MARCH 2023 – VERSION 2.0

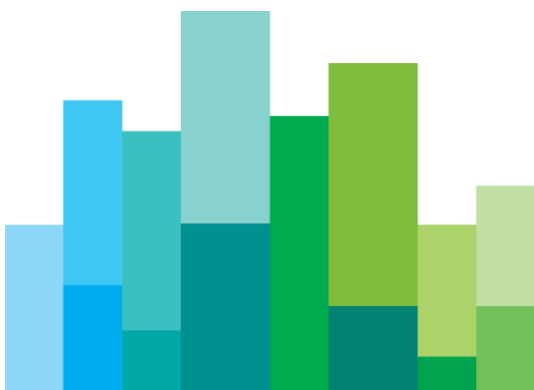


EURONEXT CLEARING

Table of contents

1. BACKGROUND AND GENERAL OVERVIEW	3
PURPOSE OF THIS DOCUMENT	4
GENERAL PROJECT OVERVIEW	4
2. MARKETS & AND PRODUCTS IN SCOPE	7
SCOPE OF MARKETS	8
SCOPE OF PRODUCTS	8
3. LEGAL AND CONTRACTUAL FRAMEWORK	9
CONTRACTUAL FRAMEWORK	10
RULEBOOK	12
4. CLEARING SERVICES	14
CLEARING SERVICES	15
ACCOUNT STRUCTURE	15
RISK MANAGEMENT	16
SETTLEMENT	16
OTHER SERVICES	19
5. IT & CONNECTIVITY	21
REPORTS	22
CONNECTIVITY	23
6. TESTING & MIGRATION STRATEGY	25
TEST PHASE	26
GO-LIVE READINESS	28
7. APPENDIX	29
ISINS LIST	30

1. BACKGROUND AND GENERAL OVERVIEW



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PURPOSE OF THIS DOCUMENT

This document has been created to capture some of the key questions that Clearing Members may have in relation to the migration of default CCP arrangements on Euronext Amsterdam, Brussels, Dublin, Lisbon and Paris cash markets, to Euronext Clearing in Q4 2023.

It will be a dynamic document, updated to capture new topics that may arise and require clarification. It will be published on the [Connect customer portal](#).

GENERAL PROJECT OVERVIEW

Why is Euronext undertaking this migration?

On 9 November 2021, Euronext announced that it would grow CC&G into Euronext Clearing, making it Euronext's CCP of choice for its cash equity, listed derivatives and commodities markets. Clients will have access to a harmonized clearing framework across the Euronext venues, providing one single platform for clients to access information on collateral, risk, and clearing. Euronext Clearing will deliver improved netting efficiencies to customers, a new Value at Risk (VaR) management framework offering increasingly efficient and resilient solutions for risk capture and allocation, cutting-edge technology, and many other benefits through the simplification of the post-trade value chain.

What are the key milestones to be aware of in this project?

The Euronext Clearing programme is divided into three main milestones:

- Milestone 1: VaR core + add-ons for Italian markets: 9 October 2023
- Milestone 2: Cash Equity migration and VaR core + add-ons for Euronext Legacy markets:
 - Euronext Brussels: 23 October 2023;
 - Euronext Amsterdam, Dublin, Lisbon and Paris: 6 November 2023;
- Milestone 3: Derivatives & Commodities migration for all markets (by Q3 2024).

What support will Euronext Clearing provide during the programme?

Euronext Clearing has launched a dedicated Client Services & Onboarding team to provide client support throughout the migration programme and beyond. The team will co-ordinate any questions you may have on the programme, triage technical and functional questions, and be your main point of contact through the external user testing phase, which begins in March 2023.

The team can be reached on the following contact details:

Email: ccp-readiness@euronext.com


















Phone: +390632395230

What supporting documentation can I expect to receive?

Please find below a table outlining the timeline and scope of client documentation being provided during the programme. We will update this table in future versions of this FAQ document.

How can I access all documentation that has been released?

We are sending documentation to our existing distribution list of key contacts via email as each document is published or updated. If you have not received the documentation, you can contact the Client Services & Onboarding team us at ccp-readiness@euronext.com so we can add you to the distribution list. Documents will also be made available on the [Connect customer portal](#).

DOCUMENT	DUE DATE	MARKET
Specifications V1 ✓	20 June 2022	
Technical documentation VaR ✓	20 June 2022	
Clearing guide "How Clearing Works" ✓	30 June 2022	
Specifications V2 ✓	30 September 2022	
API specifications first version ✓	2 November 2022	
API specifications second version ✓	27 December 2022	
Contracts, Member portal and Q&A ✓	27 January 2023	
Connectivity specifications ✓	3 February 2023	
Clearing guide "How Clearing Works" V2 ✓	16 February 2023	
Specifications third version ✓	16 February 2023	
Rulebook and Instructions ✓	27 February 2023	
Samples of FIX Format Transaction Report and Open Position (DS01) and Settlement Instructions (DP01) data files ✓	28 February 2023	
GUI User Guide	Mid March 2023	
Migration guidelines V1	March 2023	
Test book	March 2023	
Fee scheme	March 2023	
Technical documentation VaR (add-ons)	April 2023	

How can I reach the Connect customer portal?

Once you are on the Connect customer portal page, you will be asked to log in. The creation of your credentials is needed when you connect for the first time, by clicking "Create new Account". You can register with your email address.

On the Connect page, you will find all the documentation relative to the Migration project already released, including the final version of the Technical Specifications:

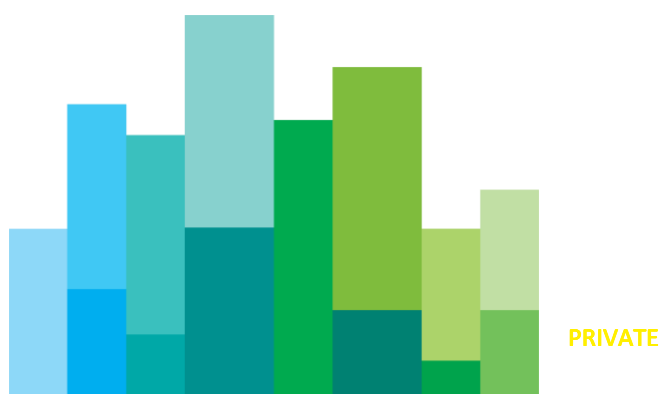
- Technical documentation on VaR
- "How Clearing Works" guide
- Reports Specifications
- API Specifications

Will Euronext organise regular meetings to discuss members' readiness for go-live, testing status, testing defects, timing of events before go-live?

User groups will be used to cover these topics.

We will also be proactive in our communication and issue monthly test bulletins to monitor progress more regularly. Dedicated meetings can be organised if necessary.

2. MARKETS & AND PRODUCTS IN SCOPE



SCOPE OF MARKETS

Which Euronext markets will migrate in Q4 2023?

Euronext Clearing will become the default CCP for Euronext Amsterdam, Brussels, Dublin, Lisbon and Paris Cash Markets in Q4 2023.

What is out of scope in Q4 2023?

Italian Cash Equities, Italian Fixed Income, Oslo Cash Equities and TNLB markets are not in the scope of this migration.

Further harmonisation opportunities on cash markets will be reassessed at a later stage.

SCOPE OF PRODUCTS

Which products within these markets are in scope of the Cash Equity migration?

The following products are within the scope of the Cash Equity migration Q4 2023 migration:

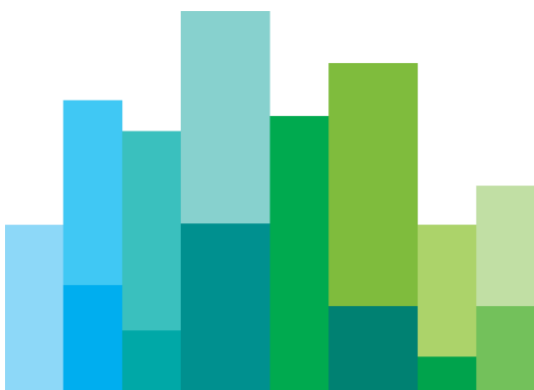
- Equities (COB and TCS);
- ETFs;
- Bonds;
- Structure Products (incl. Warrants);
- Amsterdam Open-Ended Funds;
- Instruments traded on Euronext Block (Euronext ISINs **only**) – MIC Code “TNLK”.

What is out of scope in the Cash Equity migration?

The following products are not included within the scope of the Cash Equity migration Q4 2023 migration:

- Instruments traded on Euronext Block (**non**-Euronext ISINs) – MIC Code “TNLK”;
- Instruments with bilateral settlement (non-cleared warrants);
- Delta neutral cash leg;
- Derivatives exercises and assignments;
- Traded but not listed market segment of Euronext Brussels – MIC Code “TNLB”

3. LEGAL AND CONTRACTUAL FRAMEWORK



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CONTRACTUAL FRAMEWORK

What amendments will be made to membership agreements?

Euronext Clearing has updated the current contractual framework to implement the necessary changes to reflect the new features and rules of the CCP.

Apart from general updates to the terminology and definitions, the following amendments have been made in terms of the structure of the contractual relationship with the CCP, in line with the amendments to the Rules and Instructions:

- 1) Trading Clients operating on the Euronext Markets affected by the migration will not have a contractual relationship with Euronext Clearing. On a temporary basis, Trading Clients operating on Borsa Italiana will maintain their existing contractual relationship with Euronext Clearing until further notice. As a consequence, Trading Clients operating on the Euronext Markets subject to this migration are not included in the specific section of the Request for Services form and are not requested to sign it.
- 2) As a consequence of the simplification of the rules on default management, "Members pro-tem" are removed from the Request for Services and General Terms and Conditions as such entities are not relevant for the purpose of Euronext Clearing Default Management Process and will not be requested to sign the Request for Services.

Is it possible to negotiate these agreements?

The contractual framework has been designed to align all Clearing Members on the same standard Terms & Conditions to ensure equal treatment of all members. Therefore, these agreements are non-negotiable. Of course, Euronext Clearing teams are available to clarify any points and answer questions that Clearing Members may have on the legal documentation.

What is the timeline for the release of membership agreements?

Euronext Clearing released its membership agreements package on 27 January 2023.

Clearing Members are then expected to sign the Request for Services or Simplified Request for Services by the end of May 2023.

I am operating both on Euronext Legacy markets and on Italian markets. Should I sign a new contract with Euronext Clearing?

It is expected that Clearing Members already operating with Euronext Clearing will maintain their existing contract in force, extending membership to the specific section of the Clearing Service for

Euronext Markets where necessary and applicable. In that respect, Clearing Members already active on the Italian Markets should sign the simplified Request for Services.

I am operating both on Euronext Legacy markets and on Italian markets. Will I have several contracts at the same time with Euronext Clearing?

All sections of the clearing service are regulated by the same set of General Terms and Conditions. However, Clearing Members already operating with Euronext Clearing shall extend the current membership to the new section of the clearing service for Euronext Legacy markets signing a "Simplified Request for Services".

I am operating both on Euronext Legacy markets and on Italian markets. Will I have to sign a new contract when the harmonisation will happen for Italian markets?

No. After the migration of Italian markets, you will still have only one contract, which will harmonise the terms relating to the Italian markets with the terms relating to Paris, Brussels, Lisbon, Amsterdam and Dublin markets. Indeed, your existing contract, which at migration will be extended to the relevant section of the Clearing Service for Euronext Legacy Markets, will remain in force at the time of harmonisation, provided that Euronext Clearing performs the necessary amendments to implement such harmonisation. The amendments will be notified to Clearing Members in advance according to the General Terms and Conditions Part I.

Where can I find Euronext Clearing membership agreements?

The complete membership agreements package (General Conditions Part I, the General Conditions Part II and Rules & Instructions, Request for Services / Simplified Request for Services) is available for consultation on the [Connect customer portal](#).

The Request for Services and the Simplified Request for Services forms are available on the [Member Portal](#) and Clearing Members will be able to sign them through the portal.

How can I access the Member Portal and return the Request for Services/Simplified Request for Services to Euronext?

In order to access the Euronext Clearing Member Portal, go to the [Member Portal](#) and follow the procedure below:

- **For existing Clearing Members:**
 - Access the Member Portal using the credentials of your existing Contract Representative(s);
 - Click on "Membership Management - New Services Request";
 - Select the relevant Section;

- Generate and sign via DocuSign the 'Simplified Request for Services' (Simplified MRS)
- **For new Clearing Members:**
 - Go to the Member Portal and register your Company;
 - Complete the Application Request indicating the names of the Contract and Legal Representatives;
 - Select the relevant Section;
 - Generate and sign via DocuSign the 'Request for Services' (MRS).

At the end of the process, a confirmation letter will be sent by Euronext Clearing to the person(s) indicated in the form as Contract Representative. Clearing Members will then be required to complete the admission workflow (Membership Request) on the Member Portal.

Will the Default Fund specifications and information be shared?

Full documentation will be published in April 2023. It will come in addition to the Margin model specifications provided in July 2022. The publication will include details of the additional margin components.

Is there a specific Euronext Clearing membership requirement for our Prime Broker clients?

Membership requirements are defined in our Regulations. In any case, the main requirement is related to Supervisory Capital. The Supervisory Capital values will be the same as those that already exist.

RULEBOOK

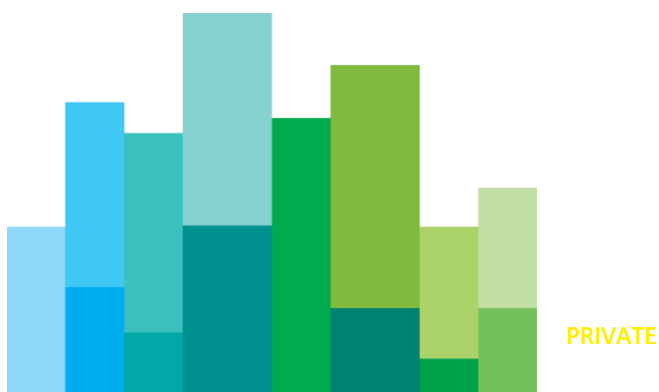
What are the changes that have been made to the Rulebook and Instructions?

The amendments to the Rulebook and Instructions cover the following topics:

- Membership onboarding requirements: introduction of dedicated fine-tuning on membership requirements, including those of an operational nature, for prospective Clearing Members.
- Legal arrangements governing participation of Trading Clients: overall simplification of legal arrangements underpinning participation of Trading Clients admitted to Euronext Legacy Cash Markets, including the removal of the direct contractual relationship between them and the CCP.
- Trade capture and interposition model (novation): introduction of specific provisions governing the CCP

- Trade capture model for Euronext Legacy Markets and adoption of novation as default CCP interposition model for all sections of the system, so as to implement a consistent and harmonised model.
- Account structures available to Clearing Members: introduction of flexible framework governing House and Client account structures available to Clearing Members active on Euronext Markets, in line with relevant EMIR requirements.
- Collateral and collateral management: targeted amendments to the set of provisions governing Collateral Account configuration and related Collateral Management workflows, including those related to Settlement Agents.
- Default management and portability: overall simplification and streamlining of the portability framework applicable for Client Account Structures, including amendments to portability windows and communication of relevant information to the CCP by Designated Clearing Members.
- Settlement arrangements and related operational rules applicable to clearing of transactions on Euronext legacy cash markets:
 - Introduction of the definitions of Delivery Account and Settlement Address;
 - Internalisation of the pre-settlement process within the CCP for trades;
 - Introduction of specific operational pre-settlement processes;
 - Introduction of specific provisions governing the management of failed settlement positions (buy-in, sell out, penalty regimes, buyer protection).

4. CLEARING SERVICES



CLEARING SERVICES

Where can I find a description of services provided by Euronext Clearing?

Euronext Clearing will provide a range of clearing services to its Clearing Members. You will find a description of these services in the document 'Euronext Clearing - How Clearing Works', available on the [Connect customer portal](#). This document covers the following topics:

- Trade Capture;
- Trade Management;
- Account Management;
- Settlement;
- Risk Framework;
- Collateral Management;
- Reporting and Connectivity;
- Non-Guaranteed Activity.

ACCOUNT STRUCTURE

Which account structure types will be supported?

Euronext Clearing will offer flexible account structure in respect of EMIR requirements related to account segregation mechanisms. For each Clearing Member the CCP will open by default at least:

- One House Account structure for the Clearing Member positions; and
- One Client Account structure for the Clearing Member's clients' positions.

The House Account Structure is mandatory for every Clearing Member.

Multiple options are available to Clearing Members to manage their client activity, with a choice of account structures providing varying degrees of segregation of positions, margins and collateral. 3 choices of Account Structure will be available:

- Individual Segregated Account Structure (ISA)
- Gross Omnibus Segregated Account Structure (GOSA)
- Net Omnibus Segregated Account Structure (NOSA).

For further information, please consult the document 'Euronext Clearing - How Clearing Works' (Section 4 – Account Management, and examples in the Appendix), available on the [Connect customer portal](#).

RISK MANAGEMENT

What Risk Management methodology will be implemented?

Euronext Clearing aims at ensuring that its Risk Framework is aligned with best market practices. Euronext Clearing has therefore developed a Value-at-Risk ('VaR') based margin methodology for the clearing of Equities and Equity Derivatives.

Specifically, a Historical Expected Shortfall approach has been chosen as the preferred risk measure to be applied for the computation of margin requirements. The new risk framework will allow for cross-margining efficiencies between cash equity and equity derivatives asset classes.

Please refer to the document 'Euronext Clearing - How Clearing Works' (Section 6 - Risk Framework). For more details on the VaR model, please refer to the modules A0 to A4.

These documents are all available on the [Connect customer portal](#).

What type of account should be used for margin movements? Will margin be debited and credited by POA/direct debit?

Payments for the Margin and the Default fund will be admitted via T2 Central Bank cash accounts. We plan to debit and credit the margin by direct debit using T2 Central Bank cash accounts.

SETTLEMENT

What will be the party 1 BIC code of Euronext Clearing? What will be the 5 digits account in Euroclear Bank?

1/ CCP account in T2S/ESM (party 1 BIC CODE) for cross settlement in ESES FR, BE, NL and NBBSSS:

- **CCEGITRRXXX (Parent BIC MOTIITMMXXX)**

2/ CCP account in T2S/ESP (party 1 BIC CODE) for intra settlement in ESP:

CCEGITRRXXX (Parent BIC IBLSPTPPXXX)

3/ CCP account in EB (5 characters) is not yet opened. BIC code of Euronext Clearing in EB is **CCEGITRR001**.

During the interim period (i.e. period between Euronext legacy markets migration and Italian markets migration, Euronext Clearing settlement account in (I)CSD are segregated I.e. the current Euronext Clearing settlement accounts used for Italian markets will be used only for Italian markets and dedicated settlement accounts will be opened in T2S ESM, T2S ESP and in Euroclear Bank for settlement of Euronext legacy markets.

e.g. CCP account in EB used for Italian markets remains 13300.

Does Euronext Clearing will have many settlement account per settlement place for the clearing activity related to Euronext legacy markets?

No, Euronext Clearing will open only one settlement account per settlement place¹ for the clearing activity related to Euronext legacy markets i.e. one settlement account in Euronext Securities Milan² (ESM), one settlement account in Euronext Securities Porto (ESP) and one settlement account in Euroclear Bank.

Note: Dedicated additional omnibus accounts will be opened in Euronext Securities Milan and in Euroclear Bank for the deposit of collateral.

Does settlement model will have an impact for settlement of French Registered Securities?

No, there is no impact, settlement instructions for French registered securities will be sent to T2S/ESES on NDC001 or NDC010 accounts of the Clearing member/settlement agent. For the CCP leg, a dedicated ESM omnibus account NDC010 will be opened in ESES books.

What are the instruments settling currently in T2S/ESES that will not be eligible for cross settlement between T2S/ESM and T2S/ESES?

Indeed, few instruments will not be eligible for cross settlement between T2S/ESM and T2S/ESES. For these securities, the settlement will be moved to Euroclear Bank (internal settlement) few months before the go live.

Instruments that are concerned are: (the ISINs list is in "7. Appendix" and based on listed products on 16 Feb 2023)

- Few Equities issued in a country not managed by ESM (Morocco, Argentina, Bermuda, Canada, Cayman Island, cote d'Ivoire, Curacao, Guernsey, Hong Kong, Island, Israel, Monaco, Senegal, Zambia)
- Equities issued in Iberclear
- Equities issued in Euronext Securities Milan
- US equities
- Portuguese Equities that are listed on Paris Market.
- Depositary receipt except LU0088087324 SES and NL0011540547 ABN AMRO BANK N.V.
- ETP issued in UK or in an ICSD

¹ An additional settlement account dedicated to French registered securities is needed for the CCP in ESM for cross settlement with ESES FR.

² Same note than 1

- Bonds issued in ICSD or having a daily or monthly coupon frequency
- In addition, Few UK securities will migrate from CREST to EB

Does the “on hold” indicator will be managed according to the direction of the settlement instruction?

No, as soon as, the “on hold” indicator = YES is indicated in the onboarding form at Delivery account level, the “on hold” indicator = YES will be indicated in the settlement instruction of the Clearing Member/Settlement agent for both direction : Delivery of Securities and Receipt of securities (i.e. Delivery of Cash).

Which partial indicator will be used by Euronext Clearing?

PARQ partial indicator will be used in T2S and PART in Euroclear Bank.

Does Euronext Clearing will support the earmarking for auto collateral in ESES?

No, all settlement instructions will be sent by Euronext clearing without EXXX earmarked indicator.

How the net settlement reference will be managed by Euronext Clearing and distributed at CSD level:

The net reference built by ENXC (called “Euronext Clearing Reference”) will be used.

1- The Euronext Clearing Reference is allocated to a trade leg in real time and distributed through the trade confirmation report in real time. The Euronext Clearing Reference will be on 16 characters e.g. :EX220603AA001N01

2- At trade date EOD, ENXC will complete the netting process: According to the settlement platform or Clearing member/settlement agent set-up at Delivery Account level, the 3 last characters of the Euronext Clearing Reference can change at trade date EOD in case of strange net:

i. When settlement occurs in Euroclear Bank, In case of strange net (DWP, RWP, FOP, cash only), the net settlement instruction will be systematically replaced by 2 aggregated settlement instructions (1 sell and 1 buy against payment)

ii. When settlement occurs in T2S, strange net will be kept as it is except if the CM/SA has opted for an aggregation in case of strange net (option to be subscribed in the membership form)

Sample: The Euronext Clearing Reference built in real time = EX220603AA001N01 can be replaced at EOD trade date, with to 2 new Euronext Clearing References: EX220603AA001B01 (buy) AND EX220603AA001S01 (sell).

The “final” Euronext Clearing Reference will be provided in the EOD settlement instruction report, in the field “Euronext Clearing Reference” (please ref to DS01-Settlement Instructions report described in the specifications “Euronext Clearing Interfaces Overview and Reporting” V2.0 30-09-2022)

3-The Euronext Clearing reference will be used as market settlement reference sent to (I)CSD through Settlement instruction messages:

- the Transaction Id field of the sese.023 will be populated like this:

Document xmlns="urn:iso:std:iso:20022:tech:xsd:sese.023.001.09"/SctiesSttlmTxInstr/

<TxId>EX220603AA002N01</TxId>

- The SEME field of MT541/MT543 will be populated with the Euronext Clearing Reference like this :20C::SEME//BX220603AA001N01

How will CSDR penalties be debited?

CSDR penalties will be paid in T2 but separately from margin costs, fees, buy-in compensation, etc.

OTHER SERVICES

Which currencies will be accepted at Euronext Clearing?

Euronext Clearing will accept all currencies traded on the Euronext Cash Markets. The denominated currencies are the following:

EUR, USD, GBP, NOK, AUD, CHF, SEK, CAD, JPY, NZD, ZAR, CNY, PLN, DKK, HUF, CZK, HKD, and SGD.

For further information, please consult the document ‘Euronext Clearing - How Clearing Works’ (Section 2.3 Accepted Currencies), available on the [Connect customer portal](#).

Will Euronext retain and be able to allocate a clearing structure for Customized Automatic Posting vs. Systematic Posting?

Yes, the same process will be maintained in the clearing system to accommodate the current Automatic and Systematic Posting features.

Automatic posting instructions combined with position account information provided at order level and reported at trade level by the trading engine will be given priority in the clearing system over systematic booking rules.

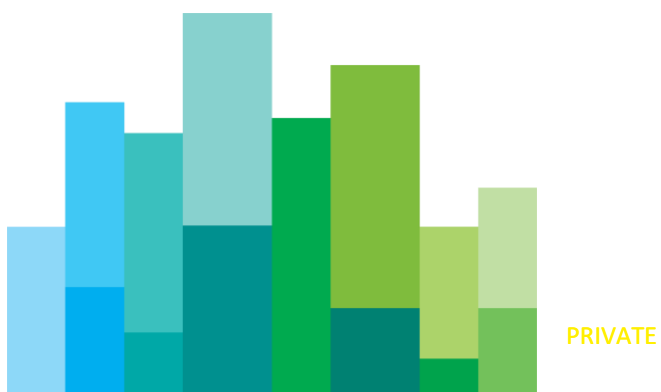
Can trades be cancelled by exchange after the Trade date?

Trades can only be cancelled by exchange on the Trade date (i.e. the current business day). Trades that require cancellation after Trade date must be managed through a reverse trade.

When will the fee scheme for Euronext Clearing services will be released?

Euronext Clearing aims to share the target fee scheme for cash equity clearing by the end March 2023.

5. IT & CONNECTIVITY



REPORTS

What reporting will be provided by Euronext Clearing and how can I access reports?

Euronext Clearing will report updated and comprehensive information to Clearing Members on trades executed and all related clearing data, including risk and collateral management reports.

Available reports will cover the following main categories:

- Trade legs confirmation;
- Open positions (including fails);
- Settlement instructions (including Fails);
- Margin calculation & margin calls;
- Collateral posted;
- Default Fund contributions;
- CSDR Penalties;
- Cash calls;
- Fees.

Information will be provided via the following channels:

- Graphical User Interface (GUI) channel: displays the user's real-time clearing data on a web browser. It also provides features that enable the Clearing Member to interact with the settlement and collateral management workflows. Additionally, it allows the user to interact with the risk management system for margin calculation and simulations on portfolios. Detailed information on the GUI will be provided in a dedicated User Guide. It allows Clearing Members to retrieve all reports generated by the Clearing System except Real-Time trade confirmation in FIX protocol and API.
- Application Programming Interface (API) channel: enables the interoperability of the clearing system with the Clearing Member's own systems. It is based on a machine-to-machine protocol and provides all the informative and operational functions that are made available for human users via the GUI. It allows Clearing Members to retrieve all reports generated by the Clearing System except Real-Time trade confirmation in FIX protocol. The client application can retrieve the Real time Trade confirmation using the dedicated API.
- Secured File Transfer Protocol (SFTP) channel: allows Clearing Members to retrieve all reports generated by the Clearing System except Real-Time trade confirmation in FIX protocol.
- FIX connection: provides only Real-Time trade confirmation in FIX protocol

For further details, refer to the document 'Euronext Clearing Interfaces Overview and Reporting 3.0' available on the [Connect](#) customer portal.

Will there be a web application available for Clearing Members?

Yes, a Graphical User Interface will be provided as a Web Application that can be accessed through a Web Browser (e.g. Google Chrome, Microsoft Edge, Mozilla Firefox).

The user will be able to access and prompt real-time data concerning all clearing processes including trade capture, pre-settlement, position keeping, margin calculation and margin calls, collateral management and default fund contributions.

Data will also be exportable in different formats using specific custom schemas and filters and processed locally on the user's desktop.

Will a file containing cleared trades also be provided in a "regular copybook format" (as for Settlement Instructions)?

A file will be available via SFTP containing FIX format trade information. Using the API, members can request a list of trades and using the GUI members can also export trade information.

CONNECTIVITY

What technical steps are required to connect to Euronext Clearing (login, security details, certificates, etc.)?

The latest version of the dedicated document called 'Clearing Connectivity specifications' providing details on these steps is available on the [Connect customer portal](#).

Do I have to use an API to use FIX?

It is not necessary to use an API to connect to FIX.

FIX is only used to retrieve information such as trade confirmation. To generate instructions requiring an action and other types of reports, an API is required.

Euronext enhances FIX to include the same information as in the API. For sending instructions, either the API or the GUI can be used. All actions can also be performed via the GUI.

Will Euronext only support API for real time messages?

Euronext will support real time message with both API and FIX.

More information will be published. You can already refer to the Euronext Clearing Interfaces Overview and Reporting Specifications V3.0.

Will the end of day file only be in FIX format if sent via SFTP?

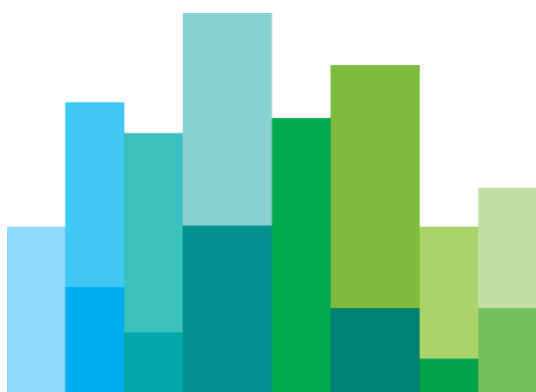
The EoD files will be available on three different formats: XML, CSV and XLSX. They can be downloaded via UI, API or SFTP. FIX session is used just for drop copy confirmation.

Do you plan to use PGP encryption?

The Clearing System will use TLS (Transport Layer Security) to secure all communications between peers. Access to Clearing System information via API or FIX is allowed only client authentication, so a client digital certificate x.509 is mandatory to complete mutual TLS handshake. Access to EoD reports via SFTP is allowed only using public/private keys.

No additional PGP key is needed.

6. TESTING & MIGRATION STRATEGY



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TEST PHASE

What are the dates to note related to the Test phase?

Complete test schedule has been shared during the User Group of February, 28th.

- Testing on Connectivity will start from 13 March 2023.
- Testing on the core clearing features will start on 20 March 2023.
- Testing of functionality with full connection both to the Markets and CSDs (i.e. expanded to Trading and Settlement platforms) will begin in June 2023.
- Sign-off will be requested from Members in advance of Go-Live.

How will I be able to connect to the test environments during the migration?

For the testing phase, you will complete dedicated forms for the collection of test static data, which include technical information for the connection to Euronext Clearing's test environment. The information you will be asked for concerns the number of users you need for the Clearing System UI, and whether you want to connect to further optional channels like APIs, FIX, SFTP.

Where can I find the forms to configure my Account Structure and Connectivity for the testing phase?

These forms have been made available on [Connect](#).
Please reach out to ccp-readiness@euronext.com if you need any assistance.

Can I expect any documentation to help me build my Test Plan?

Euronext Clearing has released a client test pack at the beginning of March 2023. It includes a list of functionalities being made available for each phase of testing activity, with a detailed description and related mandatory test cases.

We will request all Clearing Members to confirm satisfactory completion of these mandatory cases, before Go-Live, to demonstrate readiness.

The client test book represents the minimum scenarios and functionality to test, which you can expand according to your test strategy.

Will all functionalities be available for testing in March?

Not all functionalities will be available for testing in March. The list of testable features has been released in the client test pack, as well as a list of features being made available for later phases in the testing cycle.

What does it mean to be part of the pilot programme?

The pilot programme is a specific programme which includes extended tests on complex topics and requires a high level of coordination among stakeholders (markets, CSDs, CCP, etc.). Additional test cases will be provided; they will cover corporate actions, buyer protection and buy-in. Specific time windows will be dedicated to these activities. More details will be provided in the test package.

When will you be planning the 'Pilot Programme' testing (more complex co-ordinated testing including Buyer Protection/Buy-Ins)?

Pilot Programme testing is expected to take place during the front-to-back test phase when the Clearing system is connected both to Trading and Settlement systems, beginning in June. This phase is therefore expected to be during Q3 2023.

What will the impacts of the migration be for Trading Members?

There will be no functional or technical changes for Trading Members, and the membership process will stay the same.

However, Trading Members will be requested to perform front-to-back tests to ensure that there is no impact on reconciliation with their cleared activity, particularly relating to the Trade Unique Identifier (TUI) which is generated upon execution and persists through the post-trade chain. Euronext Clearing will request that Members validate this reconciliation has been completed satisfactorily.

What are Euronext's measures for determining the success of testing phases and go-live? Will this data be shared?

Clients will be required to perform a number of functional tests based on the test book that has been released and is available on Connect. Activity and success will be internally monitored. A sign-off will be required before go-live.

A monthly test bulletin will be produced so that clients can follow the progress of the project and of peers.

GO-LIVE READINESS

Does Euronext require clients to confirm their readiness before go-live?

Yes. As the Test Book has been released, mandatory tests will have to be performed and signed off before going live.

Is Euronext engaging with CSDs and agents for go-live and front-to-back testing of the new functionality?

Yes, front-to-back testing will start in June 2023 with the connection to CSDs and markets. Clearing Members are expected to coordinate with their Settlement and Paying Agents.

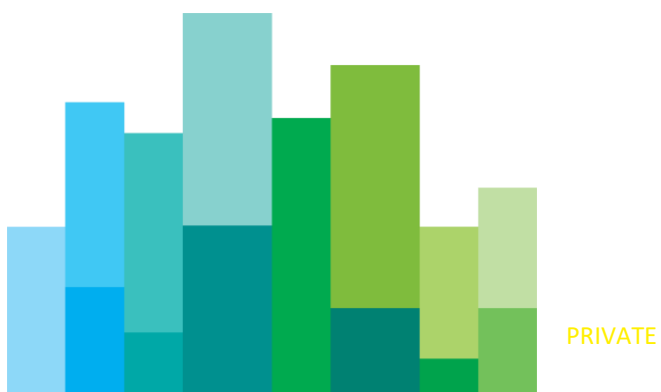
Will CMs be required to complete the same Account structure forms and Excel sheets for the Production environment as for the Test environment?

Similar forms will need to be completed for the Production environment. The Client Services & Onboarding team will work with clients in advance of configuration in Production.

What will Euronext do between 23 October and 6 November 2023 to determine the readiness of other markets and the success of Brussels?

The purpose of a 2-phased approach is to allow for Members to embed new processes and systems on a single market, before activating the full scope. The functionality will have been fully tested for all markets in advance, and we will closely monitor operations on Euronext Brussels to ensure in the interim period, to ensure behaviours are as expected, and allow for any feedback from clients to be taken into account. If there are any issues raised, we will aim to resolve without disrupting the 2nd phase of go-live on 6th November.

7. APPENDIX



ISINs List not eligible for cross settlement between ESM and ESES

(Refer to the fourth question in the Settlement part in section 4. Clearing Services)

Equities

ISIN Code	Euronext Designation	ISIN Code	Euronext Designation
AN8068571086	SCHLUMBERGER	GG00B1FQG453	BOUSSARD GAUVAUDAN
BMG3602E1084	FLOW TRADERS	GG00B1GHHH78	VOLTA FINANCE
BMG455841020	HAL TRUST	HK0000038783	EASSON HOLDINGS
BMG7209L1000	PPLA CLASS A	IL0010830391	PAYTON PLANAR
BMG7209L1182	PPLA CLASS B	IS0000000388	MAREL
BMG9349W1038	VEON	IT0004812258	AZ LEASING
BMG9887P1068	ZCI LIMITED	IT0004844848	MEDIOCREDITO EUROP
CA4433003064	H2O INNOVATION INC	IT0005072811	SEMPLACEMENTE SpA
CI0000000832	SIMAT	IT0005324105	MEDIA LAB
CI0000053161	FORESTIERE EQUAT.	IT0005336521	ITALY INNOVAZIONI
CWN814651014	MOREFIELD GROUP	IT0005351504	EDILIZIACROBATICA
ES0105025003	MERLIN PROPERTIES	IT0005353484	SEIF SPA
ES0105029005	FACEPHI	IT0005380438	MEDIA MAKER
ES0105089009	LLEIDA	IT0005380602	ILBE
ES0105118006	QUADPACK	IT0005391161	INNOVATIVE RFK SPA
ES0105333001	LOGIS CONFORT	IT0005398877	CESYNT B SHARES
ES0105362000	BARINGS CORE SPAIN	IT0005402034	CESYNT A SHARES
ES0105399002	WHITENI R CAJAL	IT0005450819	MEXEDIA
ES0105417002	IPOSA PROPERTIES	IT0005454134	GLASS TO POWER WAR
ES0105425005	KOMPIESTOS	IT0005454167	GLASS TO POWER A
ES0105447009	MAQ ADMON. URBANAS	IT0005454175	GLASS TO POWER B
ES0105463006	MAKING SCIENCE	IT0005466963	RACING FORCE
ES0105473005	INMOSUPA	IT0005507857	TATATU
ES0105478004	AGP MALAGA SOCIMI	KYG3166N1060	EPIC Ord Shares
ES0105479002	IANTE INVESTMENTS	KYG3166N1144	EPIC WARRANTS
ES0105486007	AROCA DEL PINAR	KYG4406A1022	HEDOSOPHIA ORD SHA
ES0105490009	ORBIS PROPERTIES	KYG4406A1105	HEDOSOPHIA WARRANT
ES0105492005	VREF SEVILLE	KYG4406A1287	HEDOSOPHIA UNITS
ES0105498002	HEALTHCARE ACTIVOS	KYG6096M1143	APTORM GROUP CL A
ES0105511002	INMARK	LU1068091351	BREDERODE
ES0105534004	ORINOQUIA	LU1883301340	SHURGARD
ES0105537007	GLOBAL PIELAGO	MA0000011488	MAROC TELECOM
ES0105550000	RES GESTAE SOCIMI	MC0000031187	BAINS MER MONACO
ES0105551008	IGIS NEPTUNE	MC0010000826	CFM INDOSUEZWEALTH
ES0105553004	FAIFEY INVEST	NL0000302636	V LANSCHOT KEMPEN
ES0105559001	MERDIA RE IV	NL0000442523	BRILL KON
ES0105586004	EUROLOG CANOLA	NL0000852523	TKH GROUP
ES0105590006	IMPULSE FITNESS	NL0009269109	HEIJMANS
ES0105592002	SCIENTIA SCHOOL	NL0010949392	CNOVA
ES0105601001	ARIMELIA ITG	NL0012059018	EXOR NV
ES0105612008	PERSEIDA RENTA	NL0013654809	FASTNED
ES0105623005	VANDOR REAL ESTATE	PTAZR0AM0006	AZOREAN TECH
ES0105636007	JUNGLE21	PTGVE1AE0009	GENTLEMENS EQUITY
ES0105639001	EMBENTION	SN0000033192	FIN.OUEST AFRICAIN
ES0105651006	SAGAX REAL ESTATE	US00774B2088	AERKONM INC
ES0105658001	APODACA INVERSIONE	US1491231015	CATERPILLAR INC
ES0105660007	CORE SPAIN HOLDCO	US36254L2097	GT BIOPHARMA INC
ES0105661005	AREF THALASSA	US3696043013	GENERAL ELECTRIC
ES0105664009	HOTELES BESTPRICE	US58933Y1055	MERCK AND CO INC
ES0109429037	ISPD	US69355L1098	PPLA European Unit
ES0127797019	EDP RENOVAVEIS	ZM0000000037	ZCCM
FI0009000681	NOKIA		
GA0000121459	TotalEnergiesGabon		
GB00B94QM994	EUROCASTLE INVEST.		

Equities – UK equities that will migrate from CREST to EB

ISIN Code	Euronext Designation
GB0002374006	DIAGEO
GB00BY7QYJ50	MOLTEN VENTURES
GB00BK7YQK64	HAMMERSON
GB0001500809	TULLOW OIL
GB0031477770	FD TECHNOLOGIES
GB00B9275X97	OPEN ORPHAN
GB00BYN4225	HOTELWORLD GROUP
US8730483000	T STAMP INC

Bonds

ISIN Code	Euronext Designation	ISIN Code	Euronext Designation
BE0002275445	LISMEFRN15APR2051	XS0686487421	AFD3.125%04JAN2024
BE0002632132	LISMEFRN15FEB2050	XS0693164500	RATP3.75%19OCT2026
BE0002720010	LISMEFRN15JUL54	XS0705071297	ING 3.2168%7NOV31
FR0000180549	COFIDURO,10%2024CV	XS0709555634	ORANGE4.125%NOV26
FR0010171975	OAT4%25APR55	XS0728944132	RFF4.08%16JAN62
FR001400BKN9	FCTBPCE2.2%31JUL26	XS0741933823	RFFFRN13FEB2042
FR001400BS76	AUTABS0.75%27FEB24	XS0744575092	SNCFMBFRN10FEB2032
FR001400CA34	AUTABS0.75%27MAR24	XS0744580506	SNCFMAFRN10FEB2032
FR001400CR92	AUTABS0.75%29APR24	XS0745896000	AFD3.75%15FEB2027
FR001400DCR3	AUTABS1.5%27MAY24	XS0757586267	RFF4.125%22MAR62
FR001400DZ83	BMH0.35%24DEC66	XS0766347933	AAB FRN30MCH24
FR001400E516	AUTABS1.5%30MAY23	XS0772617022	RFFCMSFRN23APR32
FR001400EL88	SAPPH22AFRN25MAR41	XS0773649438	AAB 3.22%19APR27
FR001400EL96	SAPPH22BFRN25MAR41	XS0785390468	SNCFMFRN01JUN2032
FR001400ELA8	SAPPH22CFRN25MAR41	XS0786018415	RFFFRN07JUN2032
FR001400ELB6	SAPPH22DFRN25MAR41	XS0792977984	ALLIAN 2.875%JUN24
FR001400ELC4	SAPPH22EFRN25MAR41	XS0794134295	SNCFMFRN22JUN2042
FR001400FD9	R&BHL0.45%27FEB60	XS0807189690	AAB 2.786%26JUL29
FR001400F7X5	FCTAUABSFRN27FEB23	XS0827999318	ORANGE2.5%MAR23
FR001400F9C5	AUTABS1.5%27JUN24	XS0830194501	TTECI2.125%MAR23
NL0010511119	HYPENA3 2.93%NOV97	XS0865108715	RFFFRN26DEC2031
NL0015063637	HYPENVII0.75%JUN52	XS0866276800	RFF3.30%18DEC2042
XS0106117764	BNG 6,020%28	XS0874790305	RESFF3.54%01FEB53
XS0188806870	E-MAC A 2.702%36	XS0893311299	ING 2.35%21OCT24
XS0188807506	E-MAC B 4.542%36	XS0895249620	BNP2.875%26SEP2023
XS0188807928	E-MAC C 5.942%36	XS0913979190	ORANGE3.3%11APR29
XS0188808819	E-MAC D 7.942%36	XS0917435314	SOCGEN2.90%17APR23
XS0188935174	AXA FRNPL	XS0917705120	ORANGE3.5%APR2038
XS0192967171	BNG 5.21%15DEC25	XS0919410828	LAMONDIAFRN25APR44
XS0195051114	NEDWBK 5,15%24	XS0933540527	RB2.375%22MAY23
XS0203470157	AXA FRNPL	XS0935034651	ING 1.875% 22MAY23
XS0205055675	SYDBANK 2.812%PL	XS0936339208	AFD2.250%27MAY2025
XS0207208165	E-MAC A 3.722%37	XS0937858271	AAB 2.5%29NOV2023
XS0207209569	E-MAC B 6.352%37	XS0939098363	RFF3.38%JUN2063
XS0207210906	E-MAC C 9.532%37	XS0940750762	AAB 3.03%5JUN2043
XS0207211037	E-MAC C 10.692%37	XS0953564191	CASALB3.125%JUL23
XS0209792166	VOLKS FRNJAN35	XS0954910146	RABO 3.875%25JUL23
XS0210781828	NIBC FRN21FEB40	XS0956496375	AAB 2.905%31JUL23
XS0211284491	RB FX/IL FRNFEB35	XS0963992861	ING3.6%AUG2043
XS0211328538	MBIA GF FRN15FEB35	XS0974530049	BFCM3,54%SEP2014
XS0212064231	NEDWBK FRN30OCT34	XS0983151282	RSCHIG3.0842%OCT25
XS0212581564	BQ FEDERA FRNPL	XS0984032309	RFF2.50%24OCT2023
XS0216513118	E-MAC 5A 3.292%38	XS0985666436	RFF3.125%25OCT2028
XS0216513548	E-MAC 5B 4.942%38	XS0994991411	TTECI2.875%NOV25
XS0216513977	E-MAC 5C 6.692%38	XS0997385967	KIGOIFRN27JAN64
XS0216514199	E-MAC 5D 8.192%38	XS0997536502	RFF3.25%FRN9DEC33
XS0217039311	AAB FRN18APR35	XS0997565436	RSCHIG2.936%DEC25
XS0217042885	NEDWBK FRN30OCT34	XS0997775837	BFCM3.00%28NOV23
XS0218115649	EMACNH2A 0.537%38	XS1002121454	RABOCERTIFFRNPL
XS0219724878	EIB4%15OCT37	XS1003541528	AAB 3.16% 13DEC25
XS0221640070	ISLANDBANKI 8%PLD	XS1005291650	AAB 3.1%18DEC33
XS0224480722	EIB FRN17AUG30D	XS1006494113	BFCM3.5%23JUN29
XS0228393731	JPM RAN FRNAUG35D	XS1015884080	SNCFM3.625%21JAN54
XS0229097547	EIB FX/FL FRNOCT25	XS1020769748	AAB 2.375%23JAN24
XS0232189331	NORDIC IB FRNOCT25	XS1023684522	BNPP2.875%20DEC24
XS0244143961	LANSBANKI6.25%PLD	XS1028421383	CASALB3.125%FEB26
XS0249580357	NIBC FRNPL	XS1028599287	ORANGE10YFRNPL
XS0252108674	AAB ANN OPTINTZC36	XS1032200419	RFF3.5%12FEB2064
XS0265250638	PEAMBS1 FRNSEP47	XS1039671802	AAB3.015%10JUN2026
XS0265252253	PEAMBS1 FRNSEP47	XS1039826422	RESFF2.625%29DEC25
XS0282978666	LEHMAN 5.75%PLD	XS1041772986	DSM2.375%03APR24
XS0300654331	BNG 4,525%32	XS1045553812	BFCM2.625%18MAR24
XS0349975861	RB 4.9325%33	XS1048519679	TTECI2.500%MAR36
XS0454773713	KPN 5.625%30SEP24	XS1061429632	RFF3.221%25APR45
XS0458103560	RB ZC29OCT49	XS1061430051	RFF3.234%25APR2047
XS0479694175	RFFFRN25JAN30	XS1061711575	AGN 4%25APR44
XS0494995318	BNG 4.167%18MAR30	XS1067554185	SNCFM3.20%2JUN64
XS0513509959	TENNET 4.75% JUN30	XS1068871448	BNPP2.375%20MAY24
XS0525602339	RB 4.125%14JUL25	XS1069521083	CASALB2.375%MAY24
XS0532419214	APHP3.88%03SEP28	XS1069549761	BFCM3%21MAY2024
XS0553043786	AAB FRN28OCT30	XS1072438366	AFD2.25%28MAY2026
XS0553043943	AAB FRN28OCT31	XS1072806778	RFFFRN4JUN2034
XS0553805978	AAB 4.42%29OCT25	XS1076781589	DELTALLOYDFRNPL
XS0593606121	TENNET 4.625%FEB23	XS1080163964	SODEXO2.5%24JUN26
XS0598793833	RB FX/FRN4.5%MCH24	XS1109454345	RFFFRN19SEP2044
XS0603832782	AFD4%14MAR2023	XS1111084718	AFD1.375%17SEP2024
XS0606704558	BNP4.50%21MAR23	XS1111108673	HIT2.25%24MAR25
XS0607452264	RB FRN28MCH24	XS1111559925	TTECCAN2.125%SEP29
XS0609140529	RB FRN04APR24	XS1115498260	ORANGE12YFRNPL
XS0611783928	RESFFR4,250%7OCT26	XS1115800655	ASRNED5%PL
XS0612377712	AAB FRN20APR24	XS1124857324	RFF2.195%22OCT2035
XS0616578943	RATP4.125%13APR23	XS1139315581	TTECI1.375%MAR25
XS0617251995	CASA5.125%18APR	XS1155697243	LAMONDIALEFRNPL
XS0617307375	SNCFM4.375%APRIL26	XS1155699371	RABO1.055%18DEC23
XS0618836497	AAB FRN18APR31	XS1166201035	BFCM1.25%14JAN25
XS0626260383	AAB FRN11MAY26	XS1180130939	RABO1.375%3FEB27
XS0630644168	BNG 3.875%26MAY23	XS1183596151	NIBC4%24MAR25
XS0640925706	RESFFRZC01JUL2036	XS1186684137	SNCFRE1.125%MAY30
XS0660291310	AAB FRN21SEP26	XS1189799585	BFCM1.50%13FEB30

ISIN Code	Euronext Designation
XS1190632999	SNCF1.375%18FEB25
XS1195202822	BNTPENERG2.625%PL
XS1195574881	SOGEN2.625%27FEB25
XS1204154410	CASA2.625%17MAR27
XS1207450005	AFD0.875%25MAY31
XS1210463342	SNCFRE1.475%MAR65
XS1215181980	DSM 1%9APR25
XS1218773338	SOGEN2.332%APR26
XS1218821756	AAB 1%16APR25
XS1218969746	AABN1.425%17APR45
XS1240315322	BNP1.375%02JUN25
XS1241577490	UNILEVER1%JUN23
XS1241581096	TENNETH1.75%JUN27
XS1247508903	BNPP6.125%PL
XS1265350238	AABN2.126%27JUL27
XS1265369840	SNCF2.777%JUL2115
XS1266142097	AAB2.29%29JUL30
XS1288342493	CASLB2.129%10SEP27
XS1288858548	BFCM3.00%11SEP2025
XS1289209436	ORANGE2.60%17SEP30
XS1293505639	ASR 5.125%29SEP45
XS1295345919	AABN2.5%01OCT35
XS1298431799	AAB1.50%30SEP30
XS1301052202	LUCHTHAVENS2%OCT26
XS1307243532	AABN1.803%15OCT35
XS1307369717	ENEXIS1.5%20OCT23
XS1308623658	SOCGENFRN21OCT26
XS1316035689	ORANGEFRN6NOV30
XS1324462966	AABN1.795%26NOV35
XS1325221031	AABN1.875%25NOV27
XS1325645825	BNP2.75%27JAN26
XS1328124893	AABN2.375%02DEC36
XS1333213491	AABN2.25%14DEC30
XS1344751968	AAB 0.875%14JAN26
XS1346115295	BFCM1.625%JAN16
XS1350417421	SNCFM1.69%25JAN31
XS1369250755	BNPP1.625%23FEB26
XS1374540760	AABN1.19%7MAR36
XS1376388192	AABN1.862%7MAR2031
XS1377257032	AAB 1.29%10MCH36
XS1378880253	BNPP2.875%1OCT26
XS1379607291	AAB 1.888%15MCH31
XS1381467585	AAB 1.5125%18MCH36
XS1381583902	AABN1.919%18MAR31
XS1382784509	RABO1.25%23MAR2026
XS1385945131	BFCM2.375%24MAR26
XS1387192435	VLANSO.375%31MAR23
XS1388864503	SNCF1.50%29MAY2037
XS1394791492	AAB 1%13APR31
XS1395021089	CASALB1.250%APR26
XS1396307693	BNG1.627%25APR2046
XS1396367911	ENEXIO.875%28APR26
XS1400167133	ALLIA0.857%22APR26
XS1400651706	ESSENCEVIO.5%MAY65
XS1403015156	UNILEVR1.125%APR28
XS1408317433	ORANGE1%12MAY2025
XS1409382030	NEDGASUNIE1%MAY26
XS1418786890	SOCGEN0.75%26MAY23
XS1418849482	AGN 0.25%25MAY23
XS1419646317	BNPP1.5%25MAY2028
XS1426934706	CASALB1.1276%JUN26
XS1429027375	THALES0.75%7JUN23
XS1432384409	TENNETH1.875%JUN36
XS1432384664	TENNETH1%13JUN2026
XS1434647092	PUSTORM16ZFRNAUG52
XS1434650393	SNCFM1.10%25MAY31
XS1437013870	RSCHIG1.124%JUL28
XS1437661363	SNCFM1.10%27JUN31
XS1443997223	TTECIO.250%JUL23
XS1443997819	TTECIO.750%JUL28
XS1470601656	BNPP2.25%11JAN2027
XS1485532896	KPN0.625%09APR2025
XS1485533431	KPN1.125%11SEP2028
XS1495373505	DSM0.75%28SEP2026
XS1505132602	SODEX0.750%14APR27
XS1508354450	SNCFRE1.10%27OCT36
XS1512677003	BFCM1.875%4NOV2026
XS1514051694	SNCFRE1%9NOV2031
XS1529105766	STRONGFRN22DEC2026
XS1538284230	CASAL1.875%20DEC26
XS1547407830	BNPPA1.125%10OCT23
XS1549401625	SNCFM1.375%20JAN32
XS1550135831	CASAL1%16SEP24
XS1550950759	SNCFREFRN25JUL47
XS1558472129	SNCFMOB1.5%02FEB29
XS1559529976	SNCFRFRN25JUL47
XS1565570212	VLANSO.875%15FEB27
XS1587911451	BFCM2.625%31MAR27
XS1588061777	SNCFR1.875%30MAR34
XS1591694481	TENNETH2.995%PERPT
XS1605365193	CASLB1.375%3MAY27
XS1614202049	VOLKS0.75%18MAY27
XS1614416193	BNP1.5%17NOV25

ISIN Code	Euronext Designation
XS1615680151	SNCF1.125%19MAY27
XS1616341829	SOCGENFRN22MAY24
XS1617831026	BFCM1.25%26MAY2027
XS1626933102	BNPPFRN7JUN2024
XS1637277572	BNP1%27JUN24
XS1637329639	AEGONB0.75%JUN27
XS1641600256	SNCFR2.303%JUL67
XS1648236013	WEREL1.702%17JUL25
XS1648462023	SNCFR2.25%20DEC47
XS1692167205	AAB1.65%29SEP2037
XS1693818285	TTECIO.625%OCT24
XS1693818525	TTECI1.375%OCT29
XS1717355561	BFCM1.625%15NOV27
XS1718316281	SOCGE1.375%13JAN28
XS1736944072	VESTE1.899%15DEC27
XS1736944239	VESTE2.478%15DEC32
XS1747670922	AAB1.25%10JAN2033
XS1750122225	BFCM0.75%17JUL25
XS1754989231	SNCFR2.029%22JAN48
XS1756483480	FORDLEST18FRNFEB54
XS1757377400	ALLIANDER1.625%PL
XS1764691611	SNCFRES2%5FEB2048
XS1771890578	RABO1.514%22FEB38
XS1787278008	CALONFRN6MAR2023
XS1790990474	CALON1.375%13MAR25
XS1793252419	BNPP1.25%19MAR25
XS1805257265	INGBK0.875%11APR28
XS1808338542	BNPP1%17APR2024
XS1808861840	PSABQFR0.75%APR23
XS1815136244	CALON2%2MAY33
XS1815379067	GRSTOR18FRN22MAY65
XS1816584285	SNCFRES1.5%29MAY37
XS1823513343	SODEX1.125%22MAY25
XS1823532640	BNPP1.125%22NOV23
XS1823532996	BNPPFRN22MAY23
XS1824240136	BFCM2.5%25MAY28
XS1824461906	AAB1.485%23MAY2034
XS1838022322	AAB1.6%15JUN2038
XS1844175700	AAB1.597%26MAY2043
XS1844347176	AAB1.53%2JUL2038
XS1847694764	AAB0.88%25JUN2028
XS1849568966	SNCFRES1.5%29MAY37
XS1853269428	INGBK1.445%6JUL38
XS1856040636	SNCFR4.125%22MAR62
XS1856834608	BFCM1.375%16JUL28
XS1857106618	SNCFR1.125%25MAY30
XS1865698499	INGBK1.296%15AUG33
XS1865698572	INGBK1.49%15AUG38
XS1865824111	STOR18IIFRN22SEP65
XS1873208950	UNIL0.5%6JAN2025
XS1873209172	UNIL1.375%4SEP2030
XS1874122267	TTECI1.491%SEP30
XS1874122770	TTECI1.023%MAR27
XS1874279624	AAB1.1%29AUG30
XS1874729897	AAB1.34%29AUG33
XS1874729970	AAB1.42%29AUG35
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XS1970698566	AAB1.053%28MAR2034
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Euronext Designation
 GRSTOR19FRN22MAY66
 SINO19 0.5%28JUL61
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 SNCFR0.75%25MAY36
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 CASA0.375%21OCT25
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ISIN Code
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Euronext Designation
 SODEXO1%27APR29
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 KPN0.875%14DEC2032
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 ICNSYNERGY6%1DEC25
 AEGONBK0.01%16NOV2
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ETPs

ISIN Code
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Euronext Designation
 GOLD BULLION SEC
 WT COPPER
 WT CRUDE OIL
 WT GOLD
 WT NATURAL GAS
 WT SILVER
 WT WHEAT
 WT ALL COMMODIT.
 WT PRECIOUS MET.
 WT AGRICULTURE
 UBS IRL USAUSY
 UBS IRL SP5USY
 UBS IRL WRDUSY
 UBS IRL USEUYH
 UBS ETF AWSR
 HSBC EU Sus ETF
 UBS IRL GLDVD
 UBS IRL UKSR
 UBS IRL ULOVE
 UBS IRL UPVLE
 UBS IRL UQLTE
 UBS IRL AUHEUA
 UBS IRL ULOVD
 UBS IRL UPVLD
 UBS IRL UQLTD
 WT PHYSIPLATINUM
 WT PHYSYPALLADIUM
 WT PHYSICAL SILVER
 WT PHYSICAL GOLD
 WT PHYSPM BASKET
 WT DAILY SH1 GLD
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Euronext Designation
 UBS ETF E50EUA
 UBS ETF JPNJPA
 UBS ETF EMUEUA
 UBS ETF EUREUA
 UBS ETF PACUSA
 UBS ETF CANCDA
 UBS ETF EMMUSA
 UBS ETF WSRUSA
 UBS ETF ASRUSA
 UBS ETF ESREUA
 UBS ETF PSRUSA
 UBS ETF ESCUEA
 UBS ETF UT1USA
 UBS ETF UT7USA
 UBS ETF ECOEUA
 LYXOR ETF DIV EUR
 UBS ETF MSRUUSA
 UBS ETF CBEU5
 UBS ETF CBU55
 UBS ETF CBUS5E
 UBS ETF CBUS
 UBS ETF CBUSE
 UBS ETF CAHEUA
 UBS ETF SGPDU
 UBS ETF HKDU
 UBS ETF EQLTD
 UBS ETF EPVLD
 UBS ETF ELOVD
 UBS ETF CBSUS
 UBS ETF CBSUSE
 UBS ETF JPSR
 UBS ETF USSRF
 UBS ETF CBSE
 IQ EUR CORP SRI
 IQ EUR SOV SRI
 IQ EUROPE SRI
 IQ EMU SRI
 IQ JAPAN SRI
 OSSIAM 50GE ETF
 SPDR DJIA TRUST

Structured product

ISIN Code
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Euronext Designation
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 ARAAI STN1025N
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Euronext Designation
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 ESTX STN0423B
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