



# **QUESTIONS & ANSWERS**

**ABOUT**

**TRADING STRUCTURED PRODUCTS ON SEDEX AND  
CERT-X WITH EURONEXT'S RFE MARKET MODEL**

**MAY 2022**



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# Trading Structured Products on Euronext

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## FREQUENTLY ASKED QUESTIONS ABOUT TRADING STRUCTURED PRODUCTS ON EURONEXT

### **On which Euronext markets is Euronext's Request For Execution (RFE) market model available?**

Euronext's Request For Execution (RFE) market model is currently only available on Euronext's pan-European Structured Products MTF (on Euronext Access Paris). It will be available on SeDeX and Cert-X at the time of Borsa Italiana's migration onto Optiq®.

### **Can Structured Products be traded in Continuous mode on Euronext's Request For Execution (RFE) market model?**

Only continuous trading is available on Euronext's Request For Execution (RFE) market model.

Continuous trading is preceded by a Call phase, during which trading members can start submitting orders but no matching is possible.

There is no closing auction at the end of the continuous trading phase.

### **Can Structured Products be traded in Auction mode?**

Auction-only trading is not available on Euronext's Request For Execution (RFE) market model. Only continuous trading is available.

### **Do Structured Products trade in units or in percentage of the nominal value?**

Trading is technically possible both in units or in percentage of the nominal value. Nevertheless, securitised derivatives on SeDeX and Cert-X will be traded in units only.

### **In which currencies can Structured Products be traded on Euronext's Request For Execution (RFE) market model?**

Structured Products can be listed and traded in a very wide variety of currencies in the foreign segments of Cert-X and SeDeX with settlement on the ICSD.

The availability of one currency or another will depend on the choice of the CSD by the issuer to settle an instrument. If the CSD supports a specific currency, it will be possible to trade instruments in that currency on Euronext's Request For Execution (RFE) market model.

### **What are the trading hours for Structured Products trading on Euronext's Request For Execution (RFE) market model?**

Trading on Euronext's Request For Execution (RFE) market model can take place between 08.00 CET and 22.00 CET.

But the actual trading hours of an instrument will depend on the trading hours that are available on the market on which this instrument is trading, and on the trading hours the issuer has chosen for this instrument.

On SeDeX and Cert-X the current standard trading hours are 09.05 CET to 17.30 CET.

On SeDeX, after the migration onto Optiq®, it will be possible to start trading one hour earlier (from 08.00 CET) and to stop trading at either 17.30 CET, 20.30 CET or 22.00 CET. Trading until 22.00 CET allows investors to open or close Structured Products positions up until the closing time of the US markets.

The choice of the trading hours is left at issuers' discretion and is managed at instrument level.

## How does Euronext ensure that there is sufficient liquidity on Structured Products trading on Euronext's Request For Execution (RFE) market model?

Issuers admitting their Structured Products on Euronext's Request For Execution (RFE) market model must appoint a Liquidity Provider.

On Warrants & Certificates (W&C) the Liquidity Provider is usually the issuer, but does not have to be; the issuer is free to appoint any other trading member as Liquidity Provider.

When registering as a Liquidity Provider, the trading member must sign a Liquidity Provision agreement which includes Liquidity Provision obligations in terms of:

- Presence time in the order books,
- Maximum bid-offer spreads,
- Minimum bid and offer quantities.

## What technology does Euronext's Request For Execution (RFE) market model use for trading Structured Products?

Like all other asset classes trading on Euronext markets, Structured Products trade on Euronext's proprietary Optiq® technology.

Optiq® is the enhanced, multi-market Euronext trading platform. It offers maximum flexibility, simplified and harmonised messaging, high performance and stability.

Optiq® enables trading members to benefit from:

- Enhanced performance,
- Cutting-edge technology to ensure high reliability,
- Significantly increased throughput and latency performance with minimal standard deviation,
- Highly enhanced efficiency through:
  - improved connectivity and protocols,
  - optimised messaging model (both private and public).

Optiq® offers a high quality of service:

- Flexible modular based service structure allowing members to implement functionalities that fit the needs of their business
- Harmonised cash and derivatives messaging model (both private and public). Pooling of resources during high volume periods.

## How does the Optiq® trading technology architecture apply to Structured Products?

In the Optiq® trading technology, each asset class is segregated into its own Segment. Each Segment requires its own connectivity.

Each Segment includes one or more Partitions. In simple terms, a Partition can be described as a physical machine/server. Segments which require more capacity will usually have more Partitions.

All Structured Products are grouped together in the same Segment and currently trade on two Partitions, regardless of the markets on which they are traded.

Prior to the migration of SeDeX and Cert-X onto Optiq®, a third Partition will be added to the Structured Products segment, to increase the capacity of this Segment further.

The main benefit for trading members is that once they have access to the Optiq® Structured Products Segment, they have access to all Euronext Structured Products markets.

## How does Euronext make sure that Structured Products trading is fair and orderly?

Euronext Market Surveillance monitors and controls all trading activity in real time. It aims to detect trading patterns, trading behaviours or market events which could constitute market abuse. By doing so, Euronext Market Surveillance is focused on protecting investors, trading members and the public from fraud, manipulation and abusive practices.

Market surveillance is not only a regulatory requirement but also a means to ensuring a fair and orderly market.

# Euronext's Request For Execution (RFE) Market Model

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## FREQUENTLY ASKED QUESTIONS ABOUT EURONEXT'S REQUEST FOR EXECUTION (RFE) MARKET MODEL

### What is Euronext's Request For Execution (RFE) market model?

Euronext's Request For Execution (RFE) market model is the market model specifically developed by Euronext to answer the needs of Structured Products Issuers, Liquidity Providers, Distributors and Investors.

Initially launched in 2009, it has evolved over the years to include more features to meet the evolving needs of market participants.

Euronext's Request For Execution (RFE) market model is one of Euronext's competitive advantages over other Structured Products exchanges and trading platforms in Europe. Some, but not all, of the features of Euronext's Request For Execution (RFE) market model have been copied by some of Euronext's competitors.

### How are order injection and trade execution managed?

Euronext's Request For Execution (RFE) market model is based upon open orderbooks.

Liquidity Providers and non-Liquidity Providers are all able to leave passive quotes and orders in the orderbooks. At order entry, the limit price (if any) of each order is checked against a number of thresholds (price bands %) defined by Euronext in the SeDeX and Cert-X Parameter Guide. If the limit price of the incoming order is inside the price bands, the order is inserted in the orderbook, otherwise it is rejected.

Statistically there is a much higher probability that a non-Liquidity Provider trading member trades against the Liquidity Provider of an instrument, but it is also possible that two non-Liquidity Provider trading members match against each other. But most importantly, the matching price must be within the quotes of the Liquidity Provider.

Allowing non-Liquidity Provider trading members to match against each other is a source of price competition and can result in price/spread improvement compared to trading solely against the Liquidity Provider.

Note that after the migration of SeDeX and Cert-X onto Euronext's Request For Execution (RFE) market model, there will no longer be any circuit breaker mechanisms on these two markets.

### Is Euronext's Request For Execution (RFE) market model used for trading other types of instruments?

Euronext's Request For Execution (RFE) market model is solely used for trading Structured Products on Euronext and at Borsa Italiana it will only be available on SeDeX and Cert-X. This market model has been tailored to meet the specific needs of Issuers, Liquidity Providers, Distributors and Investors in Structured Products.

### Is there any Liquidity Provider protection mechanism on Euronext's Request For Execution (RFE) market model?

The Liquidity Provider protection mechanism is at the heart of Euronext's Request For Execution (RFE) market model. The RFE mechanism has removed the risk of latency arbitrage, which can have significant negative consequences not only for Liquidity Providers but also for Investors.



On Euronext, prior to the introduction of Euronext's RFE market model, Liquidity Providers in certain situations had no choice other than to reduce their bid and offer quantities, widen their bid-offer spreads or even go out of the orderbooks. In these situations, the liquidity quality for Investors was very degraded.

The introduction of the RFE mechanism removed the risk of latency arbitrage for Liquidity Providers. This resulted in a significant increase in liquidity quality for Investors with much tighter bid-offer spreads, increased bid and offer quantities and an increase of more than 600% in the number of available Structured Products since the launch of the RFE market model on Euronext markets.

### **How does the Liquidity Provider protection mechanism work on Euronext's Request For Execution (RFE) market model?**

When the orderbook of a Structured Product trading on Euronext's Request For Execution (RFE) market model receives an Investor's aggressive order potentially matching the Liquidity Provider's passive quote, a specific Request For Execution (RFE) message is sent by the Optiq® Matching Engine to the Liquidity Provider.

The RFE message sent to the Liquidity Provider does not contain any information about the incoming aggressive order which generated the RFE message. It is simply a message that requests the Liquidity Provider to refresh its quotes on that instrument.

Upon reception of an answer to the RFE from the Liquidity Provider, the Optiq® Matching Engine runs the matching algorithm taking into account the RFE answer quote (which may or may not be different from the passive Liquidity Provider quote which was in the order book prior to the RFE).

If no answer to the RFE is received from the Liquidity Provider before the RFE delay<sup>2</sup> expires, the Optiq® Matching Engine will use in the matching algorithm the latest quote received from the Liquidity Provider.

**NOTE:** A new Liquidity Provider quote aggressing a passive non-Liquidity Provider order will not trigger an RFE.

### **Is there any Investor protection mechanism on Euronext's Request For Execution (RFE) market model?**

In order to prevent investors from trading at prices worse than the fair value quoted by the Liquidity Provider, Euronext has included an Investor protection mechanism in its Request For Execution (RFE) market model.

If the Liquidity Provider does not have quotes in an instrument orderbook, trading in that instrument is halted. Trading members can still send, update or cancel orders, but matching is not possible.

As soon as the Liquidity Provider starts posting quotes again in the instrument orderbook, trading in that instrument is resumed.

Euronext has also developed a mechanism that prevents Investors from trading knocked-out (de-activated) instruments (see Knock-Out mechanism question below).

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<sup>2</sup> The Request For Execution (RFE) delay is the maximum amount of time that the Optiq® Matching Engine allows for the Liquidity Provider to respond to an RFE. At the time of listing of an instrument on the Hybrid market model, the Issuer/Liquidity Provider can choose between a 0s (no RFE), 0.6s or a 3s RFE delay.

## **What types of orders are available to Liquidity Providers on Euronext's Request For Execution (RFE) market model?**

Liquidity Providers on Euronext's Request For Execution (RFE) market model do not send standard buy and sell limit orders. Instead, they send Bulk Quote messages.

Within the same Bulk Quote message, a Liquidity Provider is able to send bid and offer limit quotes on up to 150 different instruments.

This is a real benefit for the Liquidity Provider as bandwidth usage is greatly reduced: instead of sending 300 separate bid and offer limit orders on 150 instruments, the Liquidity Provider can send a single Bulk Quote.

Liquidity Providers are the only trading members authorised to use Bulk Quote messages on Euronext's RFE market model. A Liquidity Provider can only send Bulk Quote messages on its own Structured Products.

## **What order validities are available to Liquidity Providers on Euronext's Request For Execution (RFE) market model?**

Liquidity Provider Bulk Quotes can only be assigned a Day validity.

## **What types of orders are available to Investors on Euronext's Request For Execution (RFE) market model?**

Investors, or more generally Non-Liquidity Providers, are able to send:

- Limit orders, with possible Iceberg stipulation
- Market orders
- Stop-on-Quote orders
- Stop-on-Quote Limit orders

## **What order validities are available to Investors on Euronext's Request For Execution (RFE) market model?**

Orders from Investors, or more generally non-Liquidity Providers, can be assigned the following validity conditions:

- Day
- Good Till Date (GTD) with a validity of up to 365 days)
- Immediate Or Cancel (IOC)<sup>3</sup>

## **What is a Stop-on-Quote (Limit) order?**

A Stop-Loss (Limit) order, usually available on an Order Driven market model, becomes activated when a trade at or past the Stop level is made. Because of the very large number of Structured Products available, it is statistically very unlikely that a Stop-Loss (Limit) order on Structured Products becomes activated at or very near its Stop level. Therefore, Stop-Loss (Limit) orders are more or less useless on Structured Products.

To circumvent that shortfall, Euronext has created a unique order type only available on Euronext's Request For Execution (RFE) market model: the Stop-on-Quote (Limit) order.

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<sup>3</sup> Only available on instruments with no RFE set

A Stop-on-Quote (Limit) order becomes activated when the Liquidity Provider posts a quote at or past the Stop level:

- An Investor's Sell Stop-on-Quote (limit) order becomes activated when the Liquidity Provider posts a bid quote at or below the Stop level
- An Investor's Buy Stop-on-Quote (limit) order becomes activated when the Liquidity Provider posts an offer quote at or above the Stop level

Like a Stop-Loss (Limit) order, a Stop-on-Quote (Limit) order once activated becomes a market order and will match against the best buy or sell Investor order or Liquidity Provider quote.

### **Is there any mechanism on Euronext's Request For Execution (RFE) market model to manage Bid-Only (or Sold Out) situations?**

On Euronext's Request For Execution (RFE) market model, if there was no specific Bid-Only mechanism in place, trading on a given instrument would be halted if a Liquidity Provider ran out of inventory on that instrument and stopped posting offer quotes in the instrument orderbook (see question above regarding the Investor protection mechanism).

In order for trading to remain open on an instrument on which the Liquidity Provider is sold out, the Euronext RFE market model has a Bid-Only situation mechanism. When the Liquidity Provider wishes only to send Bid quotes, it is required to send a specific message to the Optiq® Matching Engine to start a Bid-Only period.

Upon reception of this message, the Optiq® Matching Engine will not halt trading on this instrument even if the Liquidity Provider's offer quote is missing.

Bid-Only status can be reversed at any time by the Liquidity Provider to a Both Sides status by simply sending Bid and Ask quotes again.

In particular circumstances, Liquidity Providers can decide to switch an instrument to Bid-Only Before Buy Back mode (identical to Bid Only Quote Driven currently used on SeDeX). This is an irreversible status in which only the Liquidity Provider is able to insert Buy quotes, while non- Liquidity Providers can only insert Sell orders.

### **Is there a risk, on Euronext's Request For Execution (RFE) market model, that Investors end up buying Sold-Out Structured Products from other Investors at an unfair price?**

On Euronext's Request For Execution (RFE) market model, Euronext has introduced a mechanism to protect Investors during a Bid-Only period from buying Structured Products at an unfair price, i.e. a price that is much higher than the fair price which would have been quoted by the Liquidity Provider.

Once a Liquidity Provider has sent a message to the Optiq® Matching Engine to start a Bid-Only period, the Optiq® Matching Engine starts calculating and publishing a Virtual Offer Price.

The Virtual Offer Price is derived from the Liquidity Provider's actual bid price in the orderbook and acts as the upper trading threshold. Trades between non-Liquidity Provider trading members will be authorised only if the matching price is between the Liquidity Provider's actual bid price and the Virtual Offer Price.

### **Is there any mechanism on Euronext's Request For Execution (RFE) market model to manage Knock-Out events?**

Three of the top five most popular Structured Products traded on Euronext are instruments with a knock-out barrier:

- Open-End Knock-Out Warrants (EUSIPA 2205)
- Mini-Futures (EUSIPA 2210)
- Knock-Out Warrants (EUSIPA 2200)

In order to protect Investors and to make sure that they do not trade any of these instruments after they have been knocked-out, the Euronext Request For Execution (RFE) market model has a mechanism to manage Knock-Out events: the Knock-Out By Issuer (KOBI) feature.

As soon as the Liquidity Provider detects an instrument Knock-Out event it can send a specific message to the Optiq® Matching Engine which will immediately halt trading on that instrument.

### **Is there any mechanism on Euronext's Request For Execution (RFE) market model for Investors to redeem their Structured Products after a Knock-Out event and receive the residual value (if any)?**

Following Knock-Out events on Mini-Futures, Investors are often entitled to receive a residual value. In order for Investors to be able to receive this residual value in a prompt manner, Euronext's Request For Execution (RFE) market model has a mechanism to manage residual value payments: Payment After Knock-Out (PAKO).

After an instrument has been knocked-out in the Optiq® Matching Engine, the Liquidity Provider is able to send a specific message to the Optiq® Matching Engine to start the PAKO phase. During that phase:

- Investors are able to send sell market orders to redeem their knocked-out instruments
- The Liquidity Provider is able to post bid quotes at the residual value

The matching of Investors orders against Liquidity Provider quotes will result in 'trades' which will follow the normal settlement process.

### **Is it possible to list Structured Products intra-day on Euronext's Request For Execution (RFE) market model?**

True intraday listing is extremely difficult to do for Structured Products. It requires that the:

- trading venue
- trading members
- issuers
- Liquidity Providers
- distributors and retail brokers
- Central Securities Depository (CSD)
- settlement agents and
- data vendors

are all able to create new instruments in real time. Unfortunately, this is far from being a reality.

Euronext's Request For Execution (RFE) market model has a mechanism to simulate intraday listing: Knock-In By Issuer (KIBI).

KIBI allows issuers to 'list' dormant Structured Products. The listing of these instruments follows the same process as standard Structured Products. They are created by issuers and made available to all the stakeholders mentioned above, but they remain dormant or non-activated. Their orderbook on the Optiq® Matching Engine is suspended and it is not possible for trading members to send orders and trade them.

As they are not activated, they also cannot be knocked-out (for instruments with a knock-out barrier).

At any time after the 'listing' of a KIBI instrument, the Liquidity Provider can send a specific message to the Optiq® Matching Engine and activate the instrument. Once activated, the orderbook is open, order entry is authorised and order matching can start.

## Trading Structured Products until 22.00 CET

### FREQUENTLY ASKED QUESTIONS ABOUT TRADING STRUCTURED PRODUCTS UNTIL 22.00 CET

#### Is trading past 17.30 CET possible on all Structured Products trading on the Euronext's Request For Execution (RFE) market model?

The trading hours of each Structured Product trading on Euronext's Request For Execution (RFE) market model are decided by the issuer at the time of listing.

Issuers can choose to have their Structured Products start trading at:

- 08.00 CET
- 09.05 CET

Issuers can choose to have their Structured Products stop trading at:

- 17.30 CET
- 20.30 CET
- 22.00 CET

Only Structured Products whose issuer has chosen trading hours past 17.30 CET are available for trading past that time.

#### Is trading past 17.30 CET mandatory on Structured Products that trade until 20.30 CET or 22.00 CET?

On Structured Products which trade past 17.30 CET on Euronext's Request For Execution (RFE) market model, trading beyond 17.30 CET is optional.

Trading members can indicate for each order they send whether it is valid until 17.30 CET, 20.30 CET or 22.00 CET, regardless of the trading hours of the instrument on which they send their order.

Of course, the closing time of an instrument will supersede the time validity of an order if the instrument closes earlier than the time validity of an order. For example, if a trading member has sent an order valid until 22.00 CET on an instrument trading until 17.30 CET, the member's order will have no possibility of being matched after 17.30 CET.

#### How does Euronext inform its trading members about the trading hours of each instrument?

There are several ways a member can find out the opening and closing times of a specific instrument.

Each morning, when a trading member's system connects to the Euronext Optiq® platform, trading tables containing opening and closing hours are downloaded as part of the data dictionary.

Alternatively, a trading member can look up the opening and closing times of the trading group (ClassID) in which that instrument is trading, in the Appendix to the Euronext Trading Manual.

Finally, Euronext also distributes the opening and closing times of each Structured Product in the Masterfile (see Structured Products Market Data further in this document).

#### When do trades made after 17.30 CET settle?

There is no differentiation between trades made before 17.30 CET and those made after 17.30 CET.

All trades made between 08.00 CET and 22.00 CET on the same day will be netted together (when possible) and settle on the same day.

In other words, settlement for all Structured Products trades, regardless of the trading hours, takes place 2 days after the trade date.

## Structured Products Market Data

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### FREQUENTLY ASKED QUESTIONS ABOUT STRUCTURED PRODUCTS MARKET DATA

#### What type of Structured Products market data are available at Euronext?

In addition to real-time Structured Products market data, Euronext also offers a service of referential data aimed at data vendors, distributors, retail brokers and financial portals: the Structured Products Masterfile service.

#### What is the Structured Products Masterfile service?

The Structured Products Masterfile service is a referential data offering aimed primarily at data vendors, distributors, retail brokers and financial portals.

The Structured Products Masterfile service consists of a set of files (csv, xml and xlsx) updated on a daily basis and containing a very wide range of information about all Structured Products listed and traded on Euronext.

The Structured Products Masterfile service is particularly useful to distributors, retail brokers and financial portals, allowing them to populate their website and search engines with information relevant to their clients in their product selection and investment process.

More information about the Masterfile service, including the list of files and details of the information they contain, can be found in the *Euronext Structured Products Master Files Client Specification* available on the Euronext Connect website at [connect2.euronext.com/data/client-specifications](https://connect2.euronext.com/data/client-specifications).

#### How does a trading member, distributor or retail broker subscribe to Structured Products referential market data? What is the cost of Structured Products referential market data?

For information about subscription and the costs related to Euronext Structured Products Masterfile service, please contact the Euronext market data team at [databyeuronext@euronext.com](mailto:databyeuronext@euronext.com).

