

#### Document title

# **Euronext Block: functional overview**

# Subject

Functional overview

ep 2021
or
next

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#### PREFACE

This document provides a functional overview of the Euronext Block multilateral trading facility (MTF) operated on the Optiq technology. This document provides key information for members of the platform and should be consulted alongside the related documents outlined below.

#### **RELATED DOCUMENTS**

The following is a list of the associated documents, available <u>here</u> and\_which should be read in conjunction with this document or which provide other relevant information to the user.

- General:
  - Euronext Cash and Derivatives Markets Optiq File Specifications
  - Euronext File Services User Guide
- Order entry:
  - Euronext Cash Markets Optiq OEG Client Specifications SBE Binary Interface
  - Euronext Cash Markets Optiq OEG Client Specifications FIX 5.0 Interface
  - Euronext Cash Markets Optiq Kinematics Specifications
  - Euronext Cash Markets Optiq Drop Copy Service
  - Euronext Cash Markets Optiq & TCS Error List
  - Euronext Cash Markets Optiq OEG SBE Template
- Market data:
  - Euronext Cash Markets Optiq MDG Client Specifications
  - Euronext Cash Markets Optiq MDG SBE Template

#### WHAT'S NEW ?

The following lists only the most recent modification made to this version. For the Document History table, see the Appendix.

Revision No.	Date	Change Description
3.2	13 September 2021	Various updates

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# **1. INTRODUCTION**

Euronext Block is a large-in-scale (LIS) Equities conditional trading MTF, with 2,500+ stocks available across 12 national European markets, including all Euronext countries: Belgium, Denmark, Finland, France, Germany, Ireland, Italy, The Netherlands, Norway, Portugal, Spain, and Sweden. The platform helps members source liquidity on traditionally illiquid stocks, and aims to become the venue of choice for firms seeking unique trading opportunities. The platform facilitates LIS trading on small- mid- and large-cap stocks. This market, dedicated for block trading on European securities is a segment of the current Euronext Brussels Trading Facility MTF.

Investors are in need more than ever of safe trading mechanisms to execute large trades without causing significant price movements on primary markets. Euronext Block will help investors locate natural liquidity on European equities, using a mix of standard conditional trading venue features as well as new innovative liquidity-seeking mechanisms.

# 2. MARKET OVERVIEW

Euronext Block is hosted on Optiq technology and is accessible using the same message protocols as the Euronext Equities Regulated Market: SBE or FIX 5.0.

Euronext Block allows members to submit conditional or firm orders above the LIS threshold in a fully dark trading environment separate from the Central Order Book (COB), with no pre-trade transparency thanks to the LIS waiver. Trading on Euronext Block can take place at the midpoint, both on and off tick, and other order types (limit, pegged) are available as well.

#### 2.1 REGULATION

The European entity for Euronext Block is hosted in Brussels under the Market Identifier Code (MIC) **TNLK**, and is regulated by the Financial Services and Markets Authority (**FSMA**) This entity offers trading for all European markets currently available on Euronext Block: Belgium, Denmark, Finland, France, Germany, Ireland, Italy, The Netherlands, Norway, Portugal, Spain, and Sweden.

#### 2.2 MEMBERSHIP AND ACCESS

Members of Euronext markets are automatically granted membership of Euronext Block, under the following conditions:

- (i) they are members of the relevant Euronext Market (Brussels), and if not:
- (ii) they provide the relevant **Euronext Membership Application Form** for Brussels
- (iii) they have the relevant post-trade arrangements in place with EuroCCP and/or LCH SA

While existing members of **Euronext Brussels** will not be required to submit any additional membership forms, a clearing form must be completed to indicate which markets on the platform they wish to trade. This form is available from the Euronext Membership team, and will allow them to verify that all required clearing configurations are in place.

A separate login is required for Euronext Block, but the messaging protocols are identical to the Euronext Equities Regulated Market.

Only brokers members of Euronext Block will have **direct** access to the platform. Dedicated logins can be created for any non-member to route WFL messages to the platform, but this must always be attached to a broker and must be routed via the broker's membership.

Trading is available on Euronext Block throughout the continuous opening hours of the relevant Market of Reference, and trading on these securities is on the same currency as the currency on the Market of Reference.

#### 2.3 KEY ORDER CHARACTERISTICS

The minimum notional order value shall be set at the LIS level. The check of such value is performed upon each new order entry, including order modification. Failing this, the order shall be rejected by the trading system.

All orders can be either firm or conditional, and are only valid for the current trading day. A firm order is immediately available to participate in an auction, whereas a conditional order is not. In the event of a potential match involving one or more conditional orders, the member must confirm their intention to trade. Both Limit and Pegged orders are available on this market, and pegged orders are priced at a price determined on the basis of the market conditions of the relevant Market of Reference for a given security.

The Pegged orders types are the following:

- (i) "peg primary", i.e. the best limit on the near side of the market;
- (ii) the mid-point of the best limits; or
- (iii) "peg market", i.e. the best limit on the opposite side of the market.

A Minimum Acceptable Quantity (MAQ) as well as Minimum Execution Size (MES) are also provided as an option for members.

#### 2.4 AUCTION MECHANISM

When a potential matching situation is identified, a firm-up period will be triggered followed by a random uncrossing period. During this firm-up period, all new or confirmed orders will be taken into consideration, except for conditional orders that were submitted after the random uncrossing period was triggered.

The execution price will always be as close to the Market of Reference's midpoint as possible, but price discovery away from the midpoint is possible as the platform allows the submission of both limit and pegged orders with offsets

Members will also have the ability to match large orders with MAQ or MES constraints.

#### 2.5 MARKET DATA PUBLICATION

There is no pre-trade transparency on the platform, and only executed trades will be published via the Euronext market data feed. Executions are published in real-time, or automatically deferred if eligible, as per MiFID II thresholds. The maximum delay for transactions eligible to deferred publication is limited to end of day.

The deferral period for trades eligible for deferred publication depends on pre-defined thresholds and the overall traded amount. The deferral possibilities are:

- 60min
- 120min
- EOD: After all day orders of the current trading session are cancelled, all remaining deferred trades are published.
- Only the following market data messages will be published for Euronext Block:
  - Start of Day
  - End of Day
  - Health Status
  - Technical Notification
  - Timetable
  - Market Status Change
  - Standing Data
  - Full Trade Information
- No order book details are published for Euronext Block.

#### 2.6 CLEARING AND SETTLEMENT

Euronext Block has two CCP options:

- LCH SA
- EuroCCP

The platform operates under a preferred Central Counterparty (CCP) model, and LCH SA is the default clearing partner for the following markets:

- Amsterdam
- Brussels
- Lisbon
- Paris

For these markets, however, if participants on both sides of a trade select EuroCCP as their CCP then the executed trade will be cleared by EuroCCP, their designated CCP.

Members will only be authorized to trade markets for which they have access to the default CCP for that market. So, members wishing to trade Amsterdam, Brussels, Lisbon or Paris must have access to at least LCH SA. For all other markets, members must have access to EuroCCP.

Members must have CCP authorizations in place before being granted access to the platform, for each of the relevant markets.

While this is the CCP setup currently available, this could evolve over time, allowing for more flexibility and greater CCP coverage.

### **3. MATCHING PRINCIPLES**

The platform supports various order types, but certain parameters must be met in order for an auction to be triggered, and for trades to take place.

Both firm and conditional orders are accepted, but only firm orders can participate in the auction; members must "firm-up" their conditional orders once a potential match has been identified.

The matching process is designed to help participants maximize the quantity traded during an auction. Fill rates will be improved for larger block orders thanks to the quantity (size) priority in place on the matching engine, and members will also be able to match large order with MAQ or MES constraints.

#### **3.1 TRADING STATUS OVERVIEW**

The order book will be in a call phase during the trading day, and will only move into an auction when there is potential for two or more orders to match, at which point the randomized uncrossing period is triggered.

Before a trade will take place, there will always be an auction period during which a randomized uncrossing will take place.

- The following order book trading statuses are possible:
  - Inaccessible: No operations allowed
  - Closed : During this phase at the end of the day, all orders are cancelled
  - Call: During this phase only uncrossing are allowed
  - Random Uncrossing Period: (please refer to part 1.1.4.2 Instrument Status)
  - Suspended
  - Halted
- The following instrument trading statuses are possible:
  - Scheduled
  - Suspended
  - Tradable State + Waiting for BBO
  - Random Uncrossing Period

#### **3.2 MATCHING KINEMATICS**

Trading on Euronext Block involves three steps:

- 1. Call Phase
- 2. Potential match identification
- 3. Firm up and Random uncrossing period

Once the order book opens on a given instrument, the **Call Phase** allows members to send new orders, modify existing orders, or cancel orders. During this phase, firm and conditional orders are accepted and accumulate in the order book. There is no market data published during this phase. This phase ends when there are at least two orders that can potentially match.

An incoming order as well as a change of BBO on the Market of Reference can create a **potential match** between two or more orders, thereby creating the possibility of a match between orders resting in the book. Once either situation occurs, the matching engine automatically cancels all resting conditional orders on that instrument concerned by the potential match (firm orders already in the book remain unchanged). Participants should then re-submit a new firm order to be included in the uncrossing.

The **firm-up period** is initiated as soon as the potential match is identified on the instrument, and resting conditional orders have been cancelled.

The uncrossing is triggered randomly up to 2 minutes following the identification of a potential match. All firm orders submitted before the triggered uncrossing will participate in the matching process. Conditional orders submitted once the firm-up period has begun are not eligible to participate in that auction.

Trades generated following the uncrossing period will be published in the market data feed in real-time, or on a deferred schedule if eligible.

# 4. ORDER ATTRIBUTES

#### 4.1 LARGE-IN-SCALE (LIS) ORDERS

Only orders with a notional value that is equal to or greater than the MiFID II LIS thresholds for a given instrument will be accepted, and any orders falling below the limits will automatically be rejected by the platform. This ensures for market participants that all orders on the platform are eligible to benefit from the LIS pre-trade transparency waiver.

#### The MiFID II LIS Thresholds:

	MiFID II Large-in-Scale Thresholds								
	ADT <	50 000	100 000	500 000	1 000 000	5 000 000	25 000 000	50 000 000	ADT =>
ADT (€)	50 000	≤ ADT <	≤ ADT <	≤ ADT <	≤ ADT <	≤ ADT <	≤ ADT <	≤ ADT <	100 000 000
		100 000	500 000	1 000 000	5 000 000	25 000 000	50 000 000	100 000 000	
LIS Minimum (€)	15,000	30,000	60,000	100,000	200,000	300,000	400,000	500,000	650,000

The price type of incoming orders determines the **source** of the price used to calculate whether it meets the LIS threshold:

- For Limit orders, if Order Quantity \* Order Price is equal to or greater than the pretrade LIS threshold of the instrument, then the incoming order is accepted into the order book; otherwise it is rejected.
- For non-Limit orders, if Order Quantity \* Reference Price is equal to or greater than the pre-trade LIS threshold of the instrument, then the incoming order is accepted into the order book; otherwise it is rejected.
- In **both** cases, conversion with the relevant currency rate will be applied for non-Euro prices.
  - As this threshold is checked only upon order entry, orders remain eligible even if after being partially matched their remaining amount is below the threshold.
  - The following applies upon order modification:
- Only the *Order Quantity* as specified in the inbound message is taken into account. The *Leaves Quantity* of the corresponding order is ignored;
- For non-Limit orders, an order modification may be rejected because the Reference Price has changed since the order entry of this order, and thus it may no longer be compliant with the pre-trade LIS threshold.

Should a modification request be rejected, the corresponding order remains unchanged in the order book.

#### 4.2 ORDER TYPES

The platform will accept firm orders, as well as conditional orders which must be confirmed before they can participate in an auction. Conditional orders give market participants more control over the execution of their order, and help to prevent an overfill.

A **conditional** order is identical to a **firm** order in terms of message structure and content. However, a conditional order cannot generate a trade (but they can trigger auctions); only a firm order can generate a trade on the platform. The technical message is identical, and the 'firm' or 'conditional' nature of an order is designated using a dedicated flag in **the New Order (01) (D)** message.

#### 4.2.1 Conditional Orders

A conditional order is a LIS order created with a **New Order (01) (D)** message with the *Execution Instruction* set to value '6' 'Conditional Order '.

Conditional orders rest in the book, and the matching engine continually scans all orders on a given instrument to determine if there is a potential matching scenario. Once a potential match has been identified in the order book, members will receive a **Kill (05) (Execution Report 8)** messages for their relevant conditional orders. At this stage, members must re-submit a **New Order (01) (D)** without the *Execution Instruction* set to 'Conditional Order,' thereby creating a **Firm** order which will be eligible to participate in the auction.

Market participants can submit conditional orders in any trading phase during which order entry on an instrument is allowed, but they will not be taken into account if submitted *during* an ongoing auction already triggered by other orders. New conditional orders received after the firm up process has started will not be able to participate in the upcoming auction process but will be held in the book and are therefore taken into consideration for potential matches once the auction process has ended.

As long as an order has the 'Conditional Order' flag set, it will never trade – only orders *without* this flag can generate trades. These are called 'Firm orders' and are described below.

#### 4.2.2 Firm Orders

A firm order is a LIS order created with a **New Order (01) (D)** message.

Market participants can submit firm orders in any trading phase during which order entry on an instrument is allowed. A firm order is a new order, *without* the conditional order indicator. These orders do not require any confirmation from the trading member before participating in an auction.

If a firm order is sent to confirm a conditional order during a potential matching event, the order attributes of the new firm order can be different from the original conditional order.

All firm orders present in the book during an auction will be eligible to participate, and can generate trades during the uncrossing period.

#### 4.3 PRICE TYPES

Participants have several options for pricing orders on the platform, and the various price types can match with each other.

#### 4.3.1 Limit Orders

Limit orders are buy or sell orders that are priced at the specified price limit when the order is received by the system, as well as when the auction is performed. Limit orders can only be executed at the specified price limit or at a better price.

Pricing checks will be in place to ensure that erroneously priced orders are not accepted to Euronext Block. A maximum limit price will be enforced for buy orders at 5% above the best offer on the market of reference. A minimum limit price will be enforced for sell orders of 5% below the best bid.

#### 4.3.2 Peg Orders

Pegged orders are buy or sell orders that are priced at a price determined by the Euronext Block trading system on the basis of the market conditions of the relevant Market of Reference for a given instrument when the order is received by the system.

Members must specify which of the following reference prices the order is to be pegged:

- "peg primary", i.e. the near side of the market;
- the mid-point; or
- "peg market", i.e. the opposite side of the market.

All pegged orders can include a limit price condition ensuring that they are priced at their specified price limit or at a better price. Pegged orders can only be executed at this determined price, including specified offsets and price limit, or at a better price.

The three types of peg orders accepted by the platform are described in the sections below.

#### 4.3.2.1 Primary Peg

A Primary Peg order is a type of order that follows the best bid or offer from the Market of Reference when buying or selling a security. Offset characteristics are mandatory in the case of a Primary Peg order.

In case of a Buy or Sell order, this offset could be **negative**, **positive** or **0**.

#### 4.3.2.2 Mid-point Peg

A Midpoint Peg order is a type of order that follows the best bid and best offer from the Market of Reference. Offset characteristics are forbidden for Midpoint Peg orders and if used, the order will be rejected. Since the mid-point peg price is calculated as a mid-price of the bid and offer price, it is possible that the calculated price falls at a sub-tick.

#### 4.3.2.3 Market Peg

A Market Peg order is a type of order that follows the best bid (offer) from the Market of Reference when selling (buying) a security. Offset characteristics are mandatory in the case of a Market Peg order.

In case of a Buy or Sell order, this offset could be **negative**, **positive** or **0**.

#### 4.4 **DURATION (TIME IN FORCE)**

Only day orders are accepted on the platform, and are valid until market close of the normal trading day on the day of order entry. All open orders are automatically cancelled at market close.

#### 4.5 MINIMUM QUANTITY TYPES

Each valid order can support one of the two quantity constraints defined below:

- MAQ (Minimum Acceptable Quantity): The Minimum quantity threshold can be met by aggregating multiple orders on the opposite of the book. The algorithm will go through the order book to find a cumulated quantity equal to or greater than the Minimum Quantity.
- <u>MES (Minimum Execution Size)</u>: The Minimum quantity threshold can only be met by orders with size equal or larger than the minimum. Multiple orders cannot be aggregated to meet the threshold. The algorithm will go through the order book to find orders with a minimum quantity equal to or greater than the aggressing MES.
- The MAQ and the MES constraints cannot be combined.

#### 4.6 TICK SIZE

For limit orders, the platform follows the tick size structure as defined by the Market of Reference for each instrument. Limit orders entered with a price which violates the tick size will be rejected. Mid-point peg orders are not validated for tick size and subsequently may execute at a price that is more granular than the relevant tick size. If the execution price has more than four decimal places then the matched mid-price will be rounded up to four decimal places.

# 5. WAVE FOR LIQUIDITY (WFL) MESSAGE

In addition to the standard order message types, members will also benefit from a message type allowing them to proactively seek out liquidity, making it easier to find potential counterparties. The "Wave For Liquidity (WFL)" message closely follows the Indication-of-Interest (IOI) message structure, and is optional for use by members connected to the platform.

When an WFL message is initiated, it must be routed onto the platform via a broker. Euronext Block then routes the message onwards, to the appropriate counterparties.

When firms (i.e. WFL recipients) are **targeted** by the WFL message, they respond to the request by submitting an order (conditional or firm). This order must carry the ID of the WFL it respond to and a notification is sent automatically to the WFL initiator to inform them that they have received a response to their WFL message. This WFL ID should be sent for each order submitted as a result of a WFL message received. The WFL initiator should then submit their own conditional or firm order. At this stage, the standard Euronext Block trading model is triggered.

All WFL messages are "good for day" only, and are cancelled at the end of the trading day automatically by the matching engine.

The number of open WFL messages is capped at 25 per day, per member code and per instrument. Members exceeding this limitation will receive rejection messages notifying them of the breach.

Clients must provide an indication of interest ID in every inbound WFL message, otherwise the message will be rejected. While the uniqueness of the ID is not controlled by the matching engine, members are strongly encouraged to ensure that duplicate IDs are not used.

This is also important for scorecarding and reporting purposes, as this identifier will be utilized for reporting and scorecarding purposes.

Members will be able to leverage several "filters" to define which categories of market participants they would like to target with their WFL message. All messages within the platform remain entirely anonymous, and members will not be able to directly target specific member firms (i.e., by name). A WFL message is considered informational only, and cannot participate in an auction.

When submitting a WFL message, the filter chosen will dictate to the platform which member firms should be notified that there is an indication of interest on a given instrument.

The Target Counterparties filters are described below, and the WFL messages will be routed to recipients in the following categories:

- 1. Euronext Data Driven\*: all members active on the order book for the relevant instrument, in the past **6 months** and with connectivity to the Euronext Block platform.
- 2. Interest Lists: members who have indicated an interest in the relevant instrument.
- 3. Holdings: members who have confirmed they hold inventory in the relevant instrument.
- **4.** Buy Side: members configured as buy-side firms.
- **5.** Sell Side: all brokers connected to the platform.
- Quality of Sell Side Counterparty\*\*: members with certain "quality" characteristics, such as firm-up rate
- **7.** Local Community of Specialist AMS: members identified within the local community to act as specialists on all instruments in the Dutch market.
- 8. Local Community of Specialist PAR: members identified within the local community to act as specialists on all instruments in the French market.
- **9.** Local Community of Specialist BRU: members identified within the local community to act as specialists on all instruments in the Belgian market.
- **10.**Local Community of Specialist LIS: members identified within the local community to act as specialists on all instruments in the Portuguese market.

The categories are configured directly on the platform, and are in place where the relevant information has been provided to the exchange by potential recipients of the WFL message. More categories could be added at a later stage of development.

\* The "Euronext Data Driven" filter will only be available for Euronext markets, and the period of six months can be reviewed and updated by Euronext.

\*\* The "Quality" filter will only become available to members on the platform once sufficient data can be collected, in order to appropriately route the WFL messages. Each filter can be used alone, or combined with other filters.

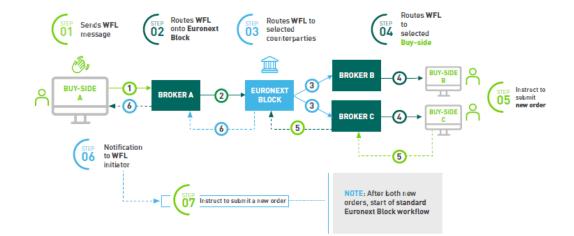
# 6. WORKFLOW & MATCHING EXAMPLES

The platform is design to maximize the total executed volume during each auction, and a sizetime priority is applied during an uncrossing. There are three main elements composing the workflow on the platform:

- WAVE FOR LIQUIDITY MESSAGES
- NEW ORDERS
- AUCTION MECHANISMS

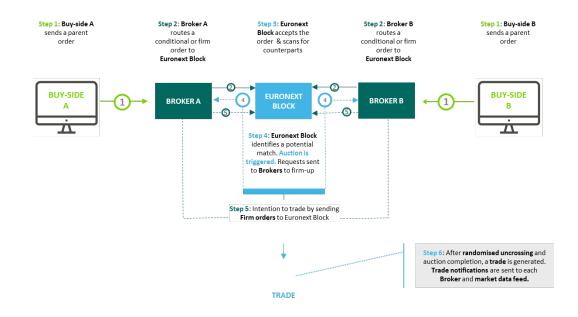
#### 6.1 WAVE FOR LIQUIDITY MESSAGES

- **Step 1:** Buy-side generates and sends a WFL message using their existing vendor's frontend solution or Broker generates WFL and submits message to the platform
- Step 2: The receiving Broker receives the WFL message, routes it directly onto Euronext Block
- Step 3: Euronext Block receives the WFL message from the Broker, and routes it to the selected counterparties as specified in the initiating WFL message
- Step 4: The selected counterparties receive the WFL message from Euronext Block on a dedicated Logical Access (login) and route it to the selected counterparties, as designated by Euronext Block (based on the initiating WFL message). The designated recipients receive the WFL message
- Step 5: If the WFL recipient is interested in responding to the WFL message, they do so by submitting a new order (conditional, or firm) to Euronext Block carrying the ID of the WFL message they are responding to
- Step 6: Once a Broker submits a new order, Euronext Block automatically sends a notification to the WFL initiator indicating a response has been sent following their WFL message
- Step 7: Once the WFL initiator receives the notification that at least one of their selected counterparties has responded to their WFL, this Broker should submit a new order (conditional, or firm) to Euronext Block
- NOTE: Once new orders are submitted to the platform the standard Euronext Block workflow begins



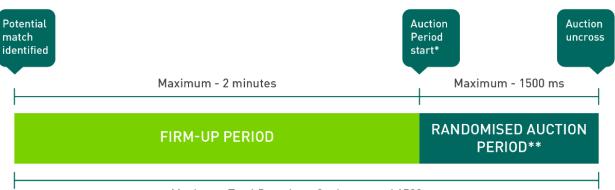
#### 6.2 NEW ORDER WORKFLOW

- Buy-side A generates a parent order and sends to the sell-side broker to place on venues
- Broker A creates a conditional or firm order, routes it to Euronext Block
- Block MTF places the order in a dark order book & continually scans for potential counterparts
- Broker B creates a conditional or firm order, routes it to Euronext Block
- Buy-side generates a parent order and sends to the sell-side broker to place on venues
- Euronext Block identifies a potential match. The Auction is triggered. Requests sent to each Broker to confirm (firm-up) their orders
- Each Broker confirms their intention to trade by sending Firm orders to Euronext Block
- Once the randomized uncrossing takes place, and the auction completes, a trade is generated and trade notifications are sent to each Broker



#### 6.3 AUCTION MECHANISM

- The auction is triggered when Euronext Block identifies two or more counterparties that have sent in orders (either conditional, or firm) that can potentially match
- Euronext Block automatically cancels the conditional orders which have triggered the auction, and requests Brokers to confirm (or firm-up) their conditional orders
- Brokers send in new firm orders during the firm-up period (conditional orders sent during this phase will not participate in the auction)
- The auction uncross is triggered at a randomized moment. Firm orders can participate in the auction as long as they arrive before the uncross is triggered.
- If a trade is matched during the auction uncross, then trade notifications are sent to each counterparty and the trade is published on the Euronext Block market data feed



Maximum Total Duration - 2 minutes and 1500 ms

# 7. ANALYTICS

The platform is design to maximize the executed volume.

#### 7.1 SCORECARDING

Safeguard analytics are designed to monitor the quality of liquidity interaction within the platform for block executions, and also the individual participant counterparty selection process.

Metrics are in place to monitor each participant's behavior for block interaction, and a scorecarding methodology will be used to rank participant activity. Results will be based on the order characteristics of each participant such as order type (i.e. conditional order vs. firm) and pricing instruction (i.e. limit, mid-price peg, outside spread). Key scorecarding metrics will include firm up rates.

# 8. TRADING CALENDAR & MARKET SCOPE

#### 8.1 TRADING CALENDAR

Trading will be supported in the 12 markets listed below. Trading hours will mirror the trading schedule of the Market of Reference. An exception to this rule is where Euronext markets are closed for the day. In this instance Euronext Block will not be available to users.

#### 8.2 INSTRUMENT UNIVERSE

Euronext Block will offer trading in pan-European securities across the following markets:

- Belgium
- Denmark
- Finland
- France
- Germany
- Ireland
- Italy
- Netherlands
- Norway
- Portugal
- Spain
- Sweden

#### 8.3 SYMBOLOGY AND CURRENCIES

Reference data for the platform is available on the Euronext market data feed, and on the Euronext File Service.

The reference data, published via "Standing Data" messages, provides information such as:

- ISIN code
- MIC (primary market; Market Identifier Code)
- Trading Currency

Full message characteristics can be found in the relevant market data specification documents.

Euronext Block supports trading in the following currencies:

- EUR
- DKK
- NOK
- SEK
- USD

# 9. VALUE AND VOLUME-BASED RISK CONTROLS

Orders with a notional value above €100,000,000 will not be accepted:

- value (order quantity x price (x exchange rate when needed)) < €100,000,000

Orders will also be limited based on their quantity:

volume (order quantity) = < (€100,000,000 / last traded price ( / exchange rate when needed))</li>

# **10. DEFERRED PUBLICATION REGIME**

The platform will automatically perform a check on each trade matched to verify its eligibility for deferred publication.

For eligible trades, post-trade publication will be deferred in accordance with the waiver rules, with the exception that T+1 publication is not possible.

If the transaction is below the relevant minimum qualifying size as set out in the tables below, then the transaction will be made public in real time.

Deferred publication thresholds and delays for shares and depositary receipts						
Average Daily Turnover (ADT) in EUR	Minimum qualifying size of transaction for permitted delay in EUR	Timing of publication after the transaction				
	10,000,000	60 minutes				
>100m	20,000,000	120 minutes				
	35,000,000	End of trading day				
	7,000,000	60 minutes				
50m - 100m	15,000,000	120 minutes				
	25,000,000	End of trading day				
	5,000,000	60 minutes				
25m - 50m	10,000,000	120 minutes				
	12,000,000	End of trading day				
	2,500,000	60 minutes				
5m - 25m	4,000,000	120 minutes				
	5,000,000	End of trading day				
	450,000	60 minutes				
1m - 5m	750,000	120 minutes				
	1,000,000	End of trading day				
	75,000	60 minutes				
500,000 - 1m	150,000	120 minutes				
	225,000	End of trading day				
	30,000	60 minutes				
100,000 - 500,000	80,000	120 minutes				
	120,000	End of trading day				
	15,000	60 minutes				
50,000 - 100,000	30,000	120 minutes				
	50,000	End of trading day				
	7,500	60 minutes				
<50,000	15,000	120 minutes				
	25,000	End of trading day*				

\*All trades will be published within the given trading day, even if the delays and thresholds allow for T+1 publication. There will be no trade publication beyond the end of the current trading day.

# **11. DOCUMENT HISTORY**

Revision No.	Date	Change Description
1.0	05 May 2017	<ul> <li>Initial Service Description document published</li> </ul>
1.1	10 October 2017	<ul><li>Added further details on tick sizes</li><li>Message throttling behaviour added</li></ul>
1.2	6 December 2017	<ul> <li>MiFID 2 changes detailed</li> </ul>
1.3	18 January 2018	<ul><li>MiFID I LIS thresholds removed</li><li>Clarified procedure around order: trade monitoring</li></ul>
1.4	7 February 2018	<ul> <li>Updated message throttling mechanism</li> </ul>
2.0	10 September 2020	<ul> <li>Document update to reflect changes related to Optiq migration</li> </ul>
3.0	08 January 2021	<ul> <li>Document update to include new WFL message details</li> </ul>
3.1	19 March 2021	<ul> <li>Updated offset rules for peg orders</li> </ul>
3.2	13 September 2021	<ul> <li>Various updates</li> </ul>

### **APPENDIX A: ORDER BOOK EXAMPLES**

The aim of this annex is to provide some examples related to Euronext Block market model. These examples are not exhaustive for all possible cases.

It should be noted that order type (i.e., firm & conditional) is not indicated in the examples below. Order book management and matching principles indicate that **only firm orders** are eligible to trade, so it can be assumed that any conditional order that triggers an auction must be firmed-up before it can trade, and any resting firm orders will be immediately able to trade.

#### A.1. EXAMPLE 1: NO POSSIBLE MATCHES

Order book							
Time	Qty	Price	Price	Qty	Time		
1	100	Mid					
2	50	Mid					
3	50	Mid					
4	20	Mid					

There are four orders in the book, on the buy side only. There is no potential for a trade because there are no sell orders available. The orders in the book are not visible to the market.

#### A.2. EXAMPLE 2: INCOMING ORDER – MATCHING A SINGLE ORDER

The initial state of the order book, with only buy orders present all priced to the midpoint:

Order book							
Time	Qty	Price	Price	Qty	Time		
1	100	Mid					
2	50	Mid					
3	50	Mid					
4	20	Mid					

An incoming sell order priced @ mid enters the book with a quantity of 100 shares.

Order book						
Time	Qty	Price	Price	Qty	Time	
1	100	Mid	Mid	100	5	
2	50	Mid				
3	50	Mid				
4	20	Mid				

The matching engine identifies a potential match and triggers the auction (conditional orders are firmed up by each counterparty) and a trade takes place for 100 shares at the midpoint price.

Order book							
Time	Qty	Price	Price	Qty	Time		
1	<mark>100</mark>	<mark>Mid</mark>	<mark>Mid</mark>	<mark>100</mark>	<mark>5</mark>		
2	50	Mid					
3	50	Mid					
4	20	Mid					

# A.3. EXAMPLE 3: INCOMING ORDER - MATCHING MULTIPLE ORDERS (SIZE-TIME PRIORITY)

The initial state of the order book, with only buy orders present all priced to the midpoint:

Order book							
Time	Qty	Price	Price	Qty	Time		
1	100	Mid					
2	50	Mid					
3	50	Mid					
4	20	Mid					

An incoming sell order priced @ mid enters the book with a quantity of 175 shares.

Order book							
Time	Qty	Price	Price	Qty	Time		
1	100	Mid	Mid	175	5		
2	50	Mid					
3	50	Mid					
4	20	Mid					

The matching engine identifies a potential match and triggers the auction (conditional orders are firmed up by each counterparty) and a trade takes place for 175 shares at the midpoint price.

The buy order with timestamp 3 is only partially executed, because although it had the same quantity as the order with timestamp 3, it was submitted later, so the previous order had time priority and fully executed first.

Order book						
Time	Qty	Price	Price	Qty	Time	
1	<mark>100</mark>	<mark>Mid</mark>	<mark>Mid</mark>	<mark>175</mark>	<mark>5</mark>	
<mark>2</mark>	<mark>50</mark>	Mid				
<mark>3</mark>	<mark>50</mark>	<mark>Mid</mark>				
4	20	Mid				

The order book after the trade executed, showing the remaining quantity of the partially executed order:

Order book						
Time	Qty	Price	Price	Qty	Time	
<mark>3</mark>	<mark>25</mark>	<mark>Mid</mark>				
4	20	Mid				

#### A.4. EXAMPLE 4: INCOMING ORDER – MATCHING A SINGLE ORDER (SIZE PRIORITY)

The initial state of the order book, with only buy orders present all priced to the midpoint:

Order book						
Time	Qty	Price	Price	Qty	Time	
1	50	Mid				
2	100	Mid				
3	50	Mid				
4	20	Mid				

An incoming sell order priced @ mid enters the book with a quantity of 100 shares.

Order book						
Time	Qty	Price	Price	Qty	Time	
1	50	Mid	<mark>Mid</mark>	<mark>100</mark>	<mark>5</mark>	
2	100	Mid				
3	50	Mid				
4	20	Mid				

The matching engine identifies a potential match and triggers the auction (conditional orders are firmed up by each counterparty) and a trade takes place for 100 shares at the midpoint price.

The buy order with timestamp 2 is fully executed, because although it was submitted later than the order with timestamp 1, it had a larger quantity, therefore was given **size** priority.

Order book						
Time	Qty	Price	Price	Qty	Time	
1	50	Mid	<mark>Mid</mark>	<mark>100</mark>	<mark>5</mark>	
2	<mark>100</mark>	<mark>Mid</mark>				
3	50	Mid				
4	20	Mid				

The order book after the trade executes:

Order book						
Time	Qty	Price	Price	Qty	Time	
1	50	Mid				
3	50	Mid				
4	20	Mid				