

## Overview

BATS Europe operates an MTF for pan-European securities, which consists of an anonymous central Integrated Book, with visible and non-displayed liquidity, and a Dark Pool with non-displayed liquidity only. BATS Europe also offers a separate smart order routing (SOR) service. The SOR service is only available to clients who are Participants of the MTF and who are categorised as Eligible Counterparties.

The BATS Europe platform is internally developed by a dedicated team of market and technology professionals to cater to the needs of the European trading community. The BATS Europe platform is hosted in a world-class data centre in the Docklands maintained by Savvis, Inc.

**MARKETS TRADED:** BATS Europe offers trading in UK, Austrian, Belgian, Danish, Dutch, Finnish, French, German, Italian, Irish, Norwegian, Portuguese, Spanish, Swedish and Swiss markets, Exchange Traded Funds, Exchange Traded Commodities and Exchange Traded Currencies. Smart Order Routing is available for all markets traded except Irish and Spanish.

**TRADING HOURS:** Core Trading – 08:00 to 16:30 (London); After Hours – Market on Close & Trading at Last. BATS Europe follows local market trading calendars and is closed Good Friday and Easter Monday.

**CLEARING & SETTLEMENT:** BATS Europe uses a Central Counterparty (CCP). LCH provides CCP services for Irish securities only and EMCF provides CCP services for all other securities. Participants can either clear directly with the CCP or via a General Clearing Participant (GCP). BATS Europe will be introducing SIX x-clear as an additional CCP. All trades conducted on the MTF or through the smart order routing service are cleared in the same way by the CCP.

## Reference Data

**TICK SIZE:** Tick sizes are generally in-line with the primary market. For specific tick sizes in each market, refer to [BATS Europe Tick Sizes](#) and for details on reference data, refer to the [Reference Data Specification](#).

**MIC:** The Market Identification Code for BATS Europe is BATE.

**TSO FLAG:** B                      **VENDOR SUFFIX:** Bloomberg .EB, Reuters .BS

## Connectivity

Extranet, Point-to-Point, Cross Connect and Co-Location. For further details, refer to the [BATS Europe Connectivity Manual](#).

**ORDER ENTRY:** FIX ports support order entry and advanced order types.

### REAL-TIME MARKET DATA

**TCP PITCH:** All publicly disseminated order, trade and administrative messages.

**TCP FAST PITCH:** Compressed market data feed with compression of up to 73% of the PITCH data stream.

**MULTICAST PITCH:** Real-time depth of book and trade information with reduced PITCH events.

**DROP:** Participant-only order, trade and cancel messages.

## Symbology

BATS Europe supports a Uniform Symbology methodology along with other Pan-European MTFs. The symbology consists of a stock code followed by a single, lower case letter designating the primary listing market centre.

Example:

Listing Market Centre	MIC	Listing Market Code	Local Stock Code	Uniform Symbology Code	Security Name
London Stock Exchange	XLON	I (lowercase L)	VOD	VODI	Vodafone Group Ord.

## Contact

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See the reverse for descriptions of available order types on the BATS Europe order books.

## Integrated Book

### Description

The BATS Europe Integrated Book provides advanced visible and non-displayed order types to participants with aggressive maker-taker pricing and price-time priority.

### Visible Order Types

#### VISIBLE LIMIT ORDER

Limit orders allow you to buy or sell a security at a specified price or better. Time in Force (TIF) availability for limit orders.

1. DAY; GTD (Good 'til Day) - If not executed, cancelled at expire time or 16:30 (London).
2. IOC (Immediate or Cancel) - Remainder of the order not filled immediately is cancelled. Market orders are implicitly IOC. Minimum quantity is available with IOC orders.

#### POST ONLY ORDER

Post only orders allow you to make a market and specify not to remove liquidity. Any incoming post only orders that would cross with a resting passive order will be rejected.

#### PARTIAL POST ONLY @ LIMIT ORDER

Partial Post Only at Limit offers liquidity removal with price improvement while allowing users to designate a Maximum Remove Percentage to control removing liquidity at the limit price.

#### RESERVE ORDER (ICEBERG)

Reserve orders allow you to enter a limit order and only display a fraction of the order size. The entire size is available for execution. The reserve portion of the order is last in priority after visible and hidden orders.

### Hidden Order Types\*

#### NON-DISPLAYED LIMIT ORDER (HIDDEN)

Non-Displayed Limit Orders allow you to hide your limit order on the BATS Europe Integrated Book.

#### PEG ORDERS (HIDDEN)

BATS Europe allows orders to peg to the PBBO\*\* in four ways:

1. Primary - pegs to the same side of the PBBO as the order
2. Market - pegs to the opposite side of the PBBO from the order
3. Midpoint - pegs to the midpoint of the PBBO
4. Alternate Midpoint - pegs to the less aggressive of the midpoint of the MBBO or one tick inside the same side of the PBBO

Minimum quantity is available for hidden order types.

## Market on Close & Trading at Last

### Description

Market on Close (MOC) allows Participants to enter orders throughout the trading day. MOC orders are not executed until the official closing price of the primary exchange is published.

Following the publication of the primary exchange's closing price, Participants can continue entering orders during the Trading At Last (TAL) phase that are immediately executed at the official closing price where liquidity is available.

## Dark Pool

### Description

The BATS Europe Dark Pool is a midpoint dark order book with time priority matching designed to minimise information leakage. It is a separate dedicated order book with the same securities, clearing, markets traded and core trading hours as the Integrated order book.

### Dark Order Types

#### MIDPOINT PEG ORDERS

The BATS Europe Dark Pool only allows Midpoint orders, which peg to the midpoint of the Primary Best Bid and Offer (PBBO).\*\*

Limit prices are allowed on orders in the BATS Europe Dark Pool as a risk management tool to specify a price floor or cap.

Time in Force (TIF) availability for orders are:

1. DAY; GTD (Good 'til Day) - If not executed, cancelled at expire time or 16:30 (London).
2. IOC (Immediate or Cancel) - Remainder of the order not filled immediately is cancelled. Minimum quantity is available with IOC orders.

#### MINIMUM ACCEPTABLE QUANTITY (MAQ)

Minimum Acceptable Quantity (MAQ) is allowed for all orders in the Dark Pool. Incoming orders which set MAQ may execute against multiple resting orders which aggregate to fulfil the MAQ. When an MAQ order is partially filled and the residual order size is lower than the MAQ, the MAQ will be reset to the residual order size.

#### DARK SELF CROSS

Dark Self Cross provides a separate environment for Participants to cross only against their own orders at a midpoint reference price. These orders only interact with other Dark Self Cross orders tagged in the same manner and must be midpoint peg orders.

### Smart Order Routing

#### CYCLE

CYCLE targets one market centre at a time and executes at the best price points up to and including the limit price on the original order. As liquidity is exhausted at each market, the full remaining quantity is sent to market centres with liquidity until the order is completely filled or there is no remaining marketable liquidity.

#### RECYCLE

RECYCLE applies to orders that have completed the CYCLE process and are resting on the BATS Integrated Book. It monitors quotes from other market centres and proactively searches for more liquidity when marketable liquidity becomes available elsewhere.

#### BATS+ PRIMARY (LSE or Liquidity Provider)\*\*\*

Access BATS Europe Dark Pool and Integrated order book liquidity up to the order's limit price then route to the chosen market centre for any remaining shares up to the limit price. Any final remainders from day orders will rest on BATS Europe's Integrated order book. IOC remainders cancel back to the sender.

\* Hidden orders may rest hidden on the BATS Europe order book. Any orders with a Time in Force of IOC are not classified as hidden orders. Where applicable, hidden orders must, at the time of entry, meet the MiFID large in scale (LIS) criteria or, for financial instruments not covered by MiFID LIS restrictions, the criteria published by BATS Europe. \*\* Primary Best Bid and Offer (PBBO) is the best bid and offer available on the relevant Primary Market. \*\*\* The LSE and Liquidnet are the only current available market centres.