

Cboe European Equities

What is Cboe BIDS VWAP-X?

- ◆ Cboe BIDS VWAP-X is a first-of-its-kind, exchange-operated trajectory crossing service for European equities allowing participants to source and match scheduled volume which is executed at a forward benchmark price.
- ◆ VWAP-X executes trades based on a standardised, exchange-regulated volume weighted average price (VWAP) methodology, helping investors to meet their participation-based algorithm schedules and price objectives.
- ◆ It is offered as a service of the Cboe BIDS Europe platform, the region's largest block negotiation platform, utilising its proven conditional trade negotiation and execution workflow.
- ◆ The service allows users to submit VWAP Indications of Interest (IOIs), which are non-actionable IOIs. When a potential match is found, the firm will be invited to "firm up" their IOI. Once confirmed, there will be a standard matching cycle from the point of each match during which a VWAP price is calculated.

What is an IOI?

- ◆ An "Indication of Interest" is a buyer's conditional, non-binding interest in buying a security in the stock market. IOIs enable participants to query available liquidity in the market without having to place visible orders on an order book.

What does VWAP mean?

- ◆ VWAP stands for volume-weighted average price, which represents the average price a security has traded at throughout a given time period, based on both volume and price. It provides traders and investors with a measure of the average price at which a stock is traded over a given period of time.
- ◆ VWAP is commonly used as a trading benchmark by investors seeking to trade participatively with volume, and who want to determine whether they bought or sold a stock at a good price.
- ◆ Many broker algorithms follow a volume-based trading schedule, meaning they participate in proportion to anticipated market volume, with child orders fed into the market progressively.

What are the benefits of using Cboe BIDS VWAP-X?

- ◆ Offers a multilateral, venue-based solution for trajectory crossing without any pre-trade information being disclosed to the wider market, limiting information leakage and adverse selection.
- ◆ Encourages interactions between natural buyers and sellers with a common execution objective and benchmark – to buy/sell shares in line with the market volume and at an average price, without incurring any spread costs.
- ◆ Orders executed at a standardised, exchange-regulated VWAP price methodology.
- ◆ Easily accessible through the proven Cboe BIDS Europe infrastructure which enables the use of conditional order functionality, established protections against information leakage and a score carding system to promote good behaviour.
- ◆ Cboe BIDS VWAP-X trades are designated as off-book, on-exchange transactions through the Cboe Recognised Investment Exchange (RIE) and sent to clearing under Cboe's interoperable clearing model.

Why has Cboe launched a VWAP crossing service?

- ◆ The secular growth in systematic and passive investing has led to an increase in participative trading strategies which seek to capture volume over a defined time period and the performance of which is typically benchmarked to the VWAP. As a result, there has been industry demand for a venue-based VWAP platform, helping investors meet their participation-based algorithm schedules and price objectives.
- ◆ Venue-based trajectory crossing solutions have started to gain traction in US equities, meaning that global banks and brokers now have improved capability/ experience to access such liquidity.

How does matching happen in Cboe BIDS VWAP-X?

The matching process on Cboe BIDS VWAP-X works as follows:

- ◆ VWAP-IOIs are submitted to the Cboe BIDS Europe system to identify potential matches.
- ◆ Once a match is found, the firms are invited to 'firm-up' their IOI within a specified time period.
- ◆ Once all firm-ups are received, eligible orders are matched with an agreed quantity, and a matching cycle then begins to determine the interval-VWAP execution price.
- ◆ The trade is executed on-exchange through the applicable Cboe exchange.
- ◆ The trade is sent to clearing under Cboe Europe's interoperable clearing model.
- ◆ The trade is reported through the Cboe CXE market data feed as an off-book, on-exchange, trade in real time.

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How can I identify trades from VWAP-X on post trade market data feeds?

- ◆ VWAP trades are published on the Cboe UK (CXE) market data feed and uniquely identified with the new sub-MIC code of **XWAP** (CXE). The trades are also flagged as Negotiated trades executed in reference to a price calculated over multiple time instances.

How will Cboe monitor trading activity on Cboe BIDS VWAP-X?

- ◆ The service utilises the unique BIDS Scorecards™ to help promote good interactions on the platform and provide protection against potential information leakage. Additional features will be added to monitor for activity during the VWAP matching cycle.
- ◆ In line with all other Exchange activity, Cboe Europe's Market Supervision team are responsible for surveillance of participants' use of the service.

How do I connect to Cboe BIDS VWAP-X?

- ◆ Sell side participants of Cboe Europe can submit V-IOIs (VWAP Indications of Interest) using their existing Cboe BIDS Europe connectivity.

Can you access Cboe BIDS VWAP-X via the BIDS Trader GUI?

- ◆ No, Cboe BIDS VWAP-X is only available for algo participation.

What is the MIC Code for Cboe BIDS VWAP-X?

- ◆ The MIC code is XWAP for Cboe UK and will be disseminated on execution reports and market data feeds.

What are the trading hours for Cboe BIDS VWAP-X?

- ◆ VWAP-X follows our standard market hours which are available here: [Cboe.com/about/hours/european-equities/](https://www.cboe.com/about/hours/european-equities/)

What is the cost to use Cboe BIDS VWAP-X?

- ◆ Our pricing is competitive, transparent and publicly available on our website in the [Price List](#) section of the Documentary Library.