



**ETF/ETP LISTING SERVICES
SERVICE DESCRIPTION**

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1. Introduction

As a Recognised Investment Exchange (“**RIE**”), Cboe Europe Equities (“**Cboe**”) will seek to attract issuers to its ETF/ETP listing service. This document describes the components of this service and provides links to more detailed information available on the Cboe website <http://www.markets.cboe.com>.

Cboe’s listing service forms part of Cboe’s overall ETF/ETP strategy. Our strategy will evolve over time to leverage our pan-European services with innovative developments designed to deliver cost and risk related efficiencies in order to help grow participation and liquidity across European ETFs and ETPs.

Our market model for listings takes into account the current European ETF/ETP environment in order to provide a pragmatic, low impact approach that meets the requirements of all stakeholders; regulators, listing authorities, issuers, market data vendors and trading participants.

2. Market Model for ETFs/ETPs listed on Cboe Europe Equities

2.1. Overview

All ETFs/ETPs listed on the Cboe Europe Regulated Market will have been authorised by an EEA competent authority. ETFs/ETPs listed on Cboe could also be made available for trading by other MTFs and, with the issuer’s approval, other Regulated Markets.

ETFs/ETPs listed on Cboe’s Regulated Market trade on one lit and one dark book, which will both be available on Cboe’s CXE environment. Trading is available to anyone with existing access to the CXE environment.

All reference prices for Cboe listed securities are generated by Cboe, with opening and closing, and daily high and low prices derived from the CXE lit and dark books.

Cboe’s Rules require that all trades in its listed ETFs/ETPs are reported to an authorised trade reporting venue. All EEA securities, including CBOE listed ETFs/ETPs, are eligible securities under Cboe’s Trade Reporting Services (BXTR).

In summary, as a listing venue Cboe will:

- Publish its listing rules and tariffs
- Operate functionality that allows the exchange to manage volatility events
- Publish high / low, opening and closing prices
- Ensure timely disclosure of corporate action information

2.2. Symbol Data and Reference Data File

It is common practice among ETF/ETP issuers to list the same fund on multiple exchanges across Europe either in the same or a different currency. Every listed ETF/ETP settles in a designated settlement depository. In most cases, the depository of the national exchange on which the fund is listed provides the settlement location. However, this model is evolving with recent listings and switches directing settlement to an international CSD, like Euroclear Bank. As such, each listed line will have a unique reference code and static data that specifies, inter alia, the settlement location.

The route order book trades take to reach the settlement location is, in all cases, via a central counterparty. Cboe ensures, through its reference data, that the central counterparties it partners with, are aware of the correct settlement location.

In order to minimise the impact on our customers and the market as a whole Cboe adopts the following approach.

- Where Cboe lists a line in an ETF/ETP that is also listed on another exchange it uses that ETFs/ETPs Uniform Symbology code (UMTF) and the exchange's unique country code identifier to designate the relationship between the two listings. As an example ABCD ("ABCD" ETF which is listed on the London Stock Exchange) will carry a UMTF code of ABCDI. Our data file for the security also carries additional information that allows the market, including vendors, to identify the security as "listed" on Cboe, along with the Central Securities Depository (CSD) for the ETF. This approach also ensures that our Smart Order Router and that of our customers can continue to operate unaffected.
- Where Cboe lists an ETF/ETP that is not also listed on another European exchange, we uniquely identify the ETF with its own UMTF symbol and use our own exchange identifier code of "x". The settlement location of the ETF can then be ascertained through the value in the CSD column.
- Where Cboe lists (or makes available for trading) an ETF/ETP that settles in a CSD other than that of the national market on which it is listed, Cboe will identify the settlement location through the value in Cboe static data's CSD column.

In order to support the above requirements, Cboe Reference Data file format carries the additional security related information required. Details of Cboe's Reference Data Specification document can be found at:

http://cdn.markets.cboe.com/resources/participant_resources/Bats_Europe_Reference_Data.pdf

For further information on Uniform Symbology please refer to

http://en.wikipedia.org/wiki/Uniform_Symbology

2.3. Trading Hours – Opening and Closing

Trading hours for our listed ETFs/ETPs on the order book are the same as for ETF/STPs that are admitted to trading, from 08:00 to 16:30 London time.

Cboe operates opening (07:50 to 08:00) and closing (16:30 to 16:35) auctions for its listed ETFs/ETPs. Cboe Periodic Auction service also operates for listed ETFs/ETPs. Details can be found on the website http://www.markets.cboe.com/participant_resources.

Cboe's Exchange Trade Reporting ("ETR") service allows Participants to submit ETRs in ETFs/ETPs, as well as all other securities, from 07:50 to 17:30. Cboe's Off-Exchange Trade Reporting ("TDM") service allows Participants to report their OTC trades in ETFs/ETPs, as well as all other securities, from 07:15 to 17:15.

2.4. Opening Price

The opening price is be the first traded price of the day on the lit or dark book.

If the trade that generated the opening price is subsequently busted then the opening price is restated and republished to the market.

If there is no trade on the day then there is no opening price published.

2.5. Closing Price

The closing price is determined as being:

- the last traded price as long as it is at or within the bid and offer at the close; if it isn't:
- the mid-price taken from the Regulated Market CXE lit book; and, if there is no valid BBO:
- the last traded price; or if no trade that day:
- the previous day's closing price.

The closing price is published and used as the reference price for the following day's static price collars.

If the trade that generated the closing price is subsequently busted then the closing price is restated and republished to the market.

2.6. Static Price Collars

Cboe operates static and dynamic price monitoring thresholds.

Static Threshold: ±10%, 20%, 30% etc.

A static threshold is set at an initial 10% away from the previous close. This prevents the acceptance of new aggressive orders that breach the static threshold, e.g. an aggressive buy orders that would breach the threshold price would be cancelled as would sell orders below the lower limit.

Once a two minute period has elapsed the threshold automatically moves to the next boundary unless Market Supervision determines that the boundary was breached due to an erroneous trade, in which case they will cancel/override the automatic move and bust the trade. The collar price thresholds are in increments of 10%.

Dynamic Threshold: $\pm 5\%$

A dynamic threshold is set at 5% away from the last traded price. Aggressive orders that breach this threshold are rejected.

Neither type of price monitoring (volatility) interruption lead to the full suspension of the market, so avoiding the need to re-open the market. If we have to re-open the market for any reason, for example, following a regulatory suspension then our Rules prescribe that:

- all resting order will be cancelled,
- that members will be notified when the market will re-open, and
- that it will re-open as if at the start of day.

If there are two or more phases of the market during a single day, the opening and closing price and the day's high and low prices will be determined as if there had been no break in the trading day.

Details describing Cboe's static and dynamic price movement procedures can be found in Cboe's Participant Manual <http://www.markets.cboe.com/regulation/library/>.

2.7. Order Types

Standard lit book and dark book order types operate for Cboe's listed ETFs/ETPs.

ETFs/ETPs listed on national European exchanges do not trade on both lit and dark order books at these venues. As such Cboe's Rules and order types consider the interaction between the two order books to ensure, inter alia, the Static Price Collars are enforced across both books.

Details describing Cboe order types for its listed securities can be found in Cboe's Participant Manual <http://www.markets.cboe.com/regulation/library/>.

2.8. Liquidity Provision Schemes

Cboe listed ETFs/ETPs are supported by market makers under defined liquidity schemes. The parameters of any scheme may vary between ETFs/ETPs and can take the form of either, a traditional designated market maker or liquidity provider scheme or, Cboe's Competitive Liquidity Provider ("CLP") program.

Details of Cboe's CLP program can be found at <http://www.markets.cboe.com/etfs/clp>

2.9. Central Counterparty Clearing

Participants clear their trades in listed ETFs/ETPs in exactly the same way as they clear all their other ETF/ETP trades on Cboe.

2.10. Settlement

Issuers listing on Cboe designate a single CSD for their listing, in the same way as they do on any other listing venue. Historically, issuers have issued and settled their listed ETFs/ETPs in the domestic CSD of the listing venue. More recently issuers have begun to issue and list their funds in an international CSD (e.g. Euroclear Bank), in order to remove cross border realignment of settlements when trading the same ISIN on multiple exchanges. Cboe's interoperable CCPs are able to settle in any or all of Europe's domestic and international CSDs so can support an Issuer's specific settlement requirements. More details in relation to internationally issued and settled ETFs can be found [here](#).

2.11. Corporate Actions

ETFs/ETPs listed on Cboe are subject to corporate events. These events are timetabled by the Issuer and diarised and communicated to the market. At the appropriate time, the ETFs/ETPs subject to a corporate event will be flagged as ex-div in the Cboe Reference Data File.

2.12. iNAV

Whilst iNAV is calculated by a number of third parties and made available on vendor platforms there is no requirement for Cboe to calculate or publish iNAV.

If demand develops for Cboe to provide an iNAV, in particular to support end investors, Cboe will review the efficacy and value of publishing an iNAV or fair value iNAV.

2.13. Trade Publication

All ETF/ETP trades whether executed on the order books or received under Cboe's Trade Reporting Services (BXTR) will be published in the same way as other securities traded on, or reported through, Cboe.

In addition to the above trade details, Cboe will publish an opening price, a closing price and the day's traded high and low price.

2.14. Listing Fees & Trading Fees

Cboe listing fees are published on its website <http://www.markets.cboe.com/etfs>.

Cboe trading fees for its listed ETFs/ETPs are published on its website, <http://www.markets.cboe.com/support/support/>.