**The key venues & how they work**

**1) Aquis Market at Close (MaC)**

**What it is:** A lit, alternative closing auction that **executes at the *primary* exchange’s official closing price** (PCP) — designed to give cheaper, competing capacity at the close. [aquis.eu](https://www.aquis.eu/markets/market-at-close)

**Mechanics (4 phases):**

1. **Unlocked phase** starts when the primary begins its close auction; orders (incl. market orders) can be entered/amended/cancelled.
2. **Random lock** occurs mid-auction (random point within a 30-second window).
3. **Locked phase** (no changes; matching by member/time priority).
4. **Execution**: If the primary publishes a valid closing price, matched orders print **at that price**; **unmatched orders are cancelled** (giving you time to re-route to the primary if needed). If the primary auction is extended or cancelled, MaC orders are rejected/cancelled for that stock. [aquis.eu](https://www.aquis.eu/markets/market-at-close)

**Notables:** “Fraction of the cost” vs primary close fees; approved by FCA/AMF; no order-size caps; member/time matching priority. [aquis.eu](https://www.aquis.eu/markets/market-at-close)

**2) Turquoise Plato Trade At Last™ (TAL)**

**What it is:** A **dark** post-close matching phase that **prints at the *primary* closing price**. Supports both **firm** and **conditional (block)** interest (via Plato Block Discovery). [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)[The TRADE](https://www.thetradenews.com/turquoise-plato-trade-at-last-closing-auction-mechanism-goes-live/?utm_source=chatgpt.com)

**Mechanics & window:**

* During the day, Turquoise Plato matches at the **primary midpoint (RPW)**; after the primary’s closing auction finishes and publishes the official close, it switches into **Trade At Last** and matches **at the PCP** **until 16:45 UK time**.
* TAL only runs if a **valid PCP** is published **before 16:45**; otherwise it does not match that day. [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)

**Reg basis & order types:** Leverages **Reference Price Waiver (RPW)** and **Large-in-Scale (LIS)** waivers; accepts firm and conditional blocks; persists resting Plato interest into the TAL phase. Available on **TGHL (UK)** and **TGHE/TQEX (EU)** MTFs. [docs.londonstockexchange.com+1](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)[TradingHours](https://www.tradinghours.com/mic/s/tqex?utm_source=chatgpt.com)

**3) Cboe Closing Cross (3C)**

**What it is:** A **post-market crossing session** (not a “trade-at-close-price” book). You submit **limit orders** after continuous trading ends; Cboe runs **back-to-back 15-second crossing periods** over ~**25 minutes** with its own **price-formation algorithm**. Prints are **not pegged to the primary close**; the cross chooses a single match price that maximises executable volume (tie-breaks to proximity to last price, then highest price). [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Key rules:**

* **Limit orders only**, on-tick; optional **MinQty**; no price improvement; **static price collars** (±15%/±20% depending on liquidity) referenced to recent prices/CBBO/previous primary close.
* Identified under **BATE (BXE)** / **CEUX (DXE)**; flagged as **Periodic Auction / out-of-session**.
* Typical session: from continuous end to **+25 minutes**, with 15-second crosses. (Segment-specific start/end times vary.) [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Quick comparison (what prints where)**

| **Venue** | **Price** | **When it runs** | **Pre-trade model** | **Primary dependency** | **Typical use case** |
| --- | --- | --- | --- | --- | --- |
| **Aquis MaC** | **Primary closing price** | Parallel with primary close (locks mid-auction; executes right after close) | **Lit**, member/time priority | Needs a valid PCP; cancels if primary auction extended/cancelled | Cheaper PCP fills; keep some flow out of crowded primary; get **price certainty** with earlier lock. [aquis.eu](https://www.aquis.eu/markets/market-at-close) |
| **Turquoise TAL** | **Primary closing price** | After the primary publishes PCP, up to **16:45 UK** | **Dark**, RPW + **LIS** (firm & conditional) | Runs only if PCP available before 16:45 | **Block/conditional** interest at PCP; extra PCP capacity post-close. [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf) |
| **Cboe 3C** | **Own cross price (not PCP)** | Post-close, ~**25 min** in 15-sec windows | Periodic cross; **limit-only**; static collars | Independent of PCP | Work residual at your chosen limit after the close; discretionary end-of-day rebalancing. [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf) |

**Pros & cons in practice**

**Aquis MaC**  
**Pros:** PCP prints with **earlier lock** (reduces last-second imbalance games); **cost savings** vs primaries; unmatched orders cancelled in time to redirect; simple connectivity (same as Aquis lit). **Cons:** **Fill risk** if no contra; still **not the official auction**; operational dependency on the primary (extensions cancel MaC participation); fragmenting size away from the primary can dilute your auction leverage. [aquis.eu](https://www.aquis.eu/markets/market-at-close)

**Turquoise TAL**  
**Pros:** PCP prints **after** the primary; supports **conditional/LIS blocks** — good for sizeable, low-footprint crosses; re-uses your Plato workflow. **Cons:** No TAL if the **PCP isn’t available before 16:45**; not the official close; purely offsetting interest (no match → no fill). [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)

**Cboe 3C**  
**Pros:** **Extra post-close liquidity window**; **price discretion** (set your limit); frequent mini-crosses can find contra without live-auction signalling; risk controls via **static collars**. **Cons:** **Not at PCP** (basis risk vs official close); **limit-only**; not part of the benchmarked close; liquidity varies by name; some instruments (e.g., REGM ETFs) excluded. [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Liquidity & market-structure context**

* Across Europe, **closing mechanisms** (primary + alternatives) are a big deal: ~**18%** of consolidated turnover in STOXX 600 names (Jan-2021 to Sep-2022). That’s why venues compete hard around the close. [SSRN](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID4639927_code2377732.pdf?abstractid=4533545&mirid=1&utm_source=chatgpt.com)
* Aquis positions MaC as **“Europe’s largest closing auction”** and highlights lower fees; treat that as a **marketing claim** and check internal fill stats by name. [aquis.eu](https://www.aquis.eu/markets/market-at-close)
* Turquoise publicly notes TAL’s **firm + conditional** support and post-close window, specifically **to 16:45 UK**. [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)[The TRADE](https://www.thetradenews.com/turquoise-plato-trade-at-last-closing-auction-mechanism-goes-live/?utm_source=chatgpt.com)
* Cboe publishes detailed **3C** specs: **15-second** crossing periods across **~25 minutes**, **limit-only**, **collars**, and **price-formation** logic distinct from PCP. [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Routing playbook (what most buy-/sell-sides do)**

1. **Anchor in the primary** for benchmarked flow (you need official close participation).
2. **Layer MaC** for price-certain PCP fills at lower cost and to avoid adding to visible primary imbalances; consider the lock timing so you can still redirect if size doesn’t match. [aquis.eu](https://www.aquis.eu/markets/market-at-close)
3. **Use TAL** to sweep **dark/LIS PCP** interest after the close (firm + conditional). Great for high-touch/PT names where you have blocks to pair. [docs.londonstockexchange.com](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)
4. **Work residuals in 3C** if you want discretion on price **post-close** (accepting basis risk vs PCP). The 15-sec cadence can find natural contra with less crowding. [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Handy venue specifics (quick reference)**

* **Aquis MaC (AQXE/AQEU)**: sequential phases; random lock mid-auction; cancels if primary extends; executes at PCP; member/time priority; “fraction of cost”. [aquis.eu+1](https://www.aquis.eu/markets/market-at-close)
* **Turquoise TAL (TGHL UK / TGHE/TQEX EU)**: day = midpoint; **TAL = PCP** after close, **until 16:45 UK**; **RPW + LIS**, **firm + conditional** allowed; Plato interest persists into TAL. [docs.londonstockexchange.com+1](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-trading-services-description-v3_40_i5.pdf)[TradingHours](https://www.tradinghours.com/mic/s/tqex?utm_source=chatgpt.com)
* **Cboe 3C (BATE/CEUX)**: **post-market** 25-min session; **15-sec crosses**; **limit-only**; static collars (±15%/±20%); price chosen by crossing algorithm; not PCP. [cdn.cboe.com](https://cdn.cboe.com/resources/participant_resources/BCE-GuidanceNote_3C_Final.pdf)

**Explicit venue fees (close)**

| **Venue** | **What you pay to execute** | **Notes** |
| --- | --- | --- |
| **Primary exchange (example: LSE SETS close)** | **0.45 → 0.35 → 0.25 bps** (banded by monthly value traded). Minimum **£0.11** per executed order. | LSE publishes a single equity value-traded scheme that applies to electronic executions (incl. auctions). No separate “close surcharge” is listed in the public tariff. Other schemes (e.g., LPS, Liquidity Taker Packages) can alter your effective rate. [London Stock Exchange Docs](https://docs.londonstockexchange.com/sites/default/files/documents/trading-services-price-list-january-2025.pdf) |
| **Aquis Market-at-Close (MaC)** | **Either** fixed **£30,000 / month** (unlimited MaC messages) **or** **0.1 bps** on MaC traded value (member can elect; 6-month minimum; 3-month notice to switch). | MaC executes **at the primary official close price**. Aquis positions MaC as a lower-cost alternative to national exchanges’ close; MaC messages don’t count towards Aquis’ message-based tiers. [aqx-web-prod-s3-public-read.s3.eu-west-2.amazonaws.com+1](https://aqx-web-prod-s3-public-read.s3.eu-west-2.amazonaws.com/Aquis_Fee_Schedule_effective_1_April_2025_5e7ccb68d8.pdf)[Aquis](https://www.aquis.eu/markets/market-at-close?utm_source=chatgpt.com) |
| **Turquoise Plato Trade-At-Last (TAL)** | **No incremental TAL fee**; TAL prints are charged **as per Turquoise Plato Order Book** (**0.30 bps** standard EU tariff). | TAL matches **at the primary close price** after the close (up to 16:45 UK). Supports firm + conditional (LIS) interest. [London Stock Exchange Docs+1](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-europe-tariff-schedule-2.6ii-eff.-1-jan-2025.pdf) |
| **Cboe Closing Cross (3C)** | **Free** for standard 3C executions (fee code **CC**). **0.075** (bps) if the match is **self-match** (fee code **CS**). | 3C is a **post-close periodic cross** with its own price formation; **not pegged to PCP**. Fees are quoted **per side** on Cboe’s schedule. [Cboe Global Markets+1](https://www.cboe.com/europe/equities/participation/fee_schedule/) |

**Rule-of-thumb all-in venue fee per £10m executed (illustrative):**

* LSE primary close @ **0.35 bps** mid-band ≈ **£3,500**. [London Stock Exchange Docs](https://docs.londonstockexchange.com/sites/default/files/documents/trading-services-price-list-january-2025.pdf)
* Aquis MaC @ **0.1 bps** ≈ **£1,000** (or **£0** marginal if you’re already on the **£30k/mo** fixed plan and under its cap). **Fixed vs variable MaC break-even ≈ £3bn** MaC notional per month. [aqx-web-prod-s3-public-read.s3.eu-west-2.amazonaws.com](https://aqx-web-prod-s3-public-read.s3.eu-west-2.amazonaws.com/Aquis_Fee_Schedule_effective_1_April_2025_5e7ccb68d8.pdf)
* Turquoise TAL @ **0.30 bps** ≈ **£3,000**. [London Stock Exchange Docs](https://docs.londonstockexchange.com/sites/default/files/documents/turquoise-europe-tariff-schedule-2.6ii-eff.-1-jan-2025.pdf)
* Cboe 3C **Free** (standard) = **£0**; **£750** if self-matched (0.075 bps). [Cboe Global Markets](https://www.cboe.com/europe/equities/participation/fee_schedule/)

Notes: Figures exclude broker commissions, exchange membership/connectivity, and CCP/settlement fees. Statutory taxes (e.g., UK SDRT, FR/ES/IT FTT) depend on **instrument jurisdiction**, not venue.

**Implicit / practical cost drivers (quick matrix)**

| **Factor** | **Primary closing auction** | **Aquis MaC** | **Turquoise TAL** | **Cboe 3C** |
| --- | --- | --- | --- | --- |
| **Benchmark certainty** | **Official PCP** | PCP (same as primary) | PCP (same as primary) | **Not** PCP (basis risk) |
| **Fill probability / depth** | **Highest** (crowded) | Good, but contingent on contra | Good for **blocks/conditional** | Varies; depends on cross interest |
| **Impact risk** | Higher (visible imbalances) | Lower vs primary (earlier lock) | Low (post-close PCP) | Low (post-close), but not PCP |
| **Info leakage** | Auction IOI streams visible | Lower (order lock then print) | Low (dark/conditional) | Low-moderate (visible 3C book) |
| **Operating risk** | Cut-off sensitive | Dependent on primary publishing PCP | Runs only if PCP published by cut-off | Runs regardless of PCP |