LME
An HKEX Company

To:	All members and other interested parties
Ref:	24/240
Classification:	General Updates — Trading
Date:	04 September 2024
Subject:	**LME WHITE PAPER ON ENHANCING LIQUIDITY**

Summary

1. This Notice announces the publication of the attached LME White Paper on Enhancing Liquidity (the "**White Paper**"), which sets out a package of measures designed to modernise the LME's market structure, boost transparency and increase price competition, while protecting the unique features of its market that serve the physical metal communities.

Background and overview

2. Following on from the successful introduction of the Additional VWAP Closing Price methodology in Q1 2024, this package of initiatives to enhance liquidity is the next major step in the LME's market modernisation journey.

3. The set of measures includes a liquidity provider programme, the introduction of block trade thresholds, new trading functionality and market data changes. The measures complement one another and are intended to be delivered as a package to maximise their effectiveness.

Market engagement

4. The LME will be hosting a webinar **5 September 2024 from 13.30-14.15 BST** to discuss the details and implications of the White Paper measures and to provide stakeholders the opportunity for follow-up questions. All market participants are welcome to join, and can register **here**.

5. The White Paper outlines the LME's approach and provides details on the package of measures in order to help market participants prepare for these changes, noting that specific measures may be subject to market consultation and/or regulatory approvals.

6. While the White Paper is not a discussion paper or consultation, the LME welcomes feedback in any area. Stakeholders can reach out to their existing contacts, or contact market.engagement@lme.com.

7. The LME will also establish a Blocks Working Group ("**BWG**") in order to discuss the implementation detail around blocks and for members to raise any questions or concerns with the solution design. Members interested in participating in the BWG are asked to contact the LME at market.engagement@lme.com.

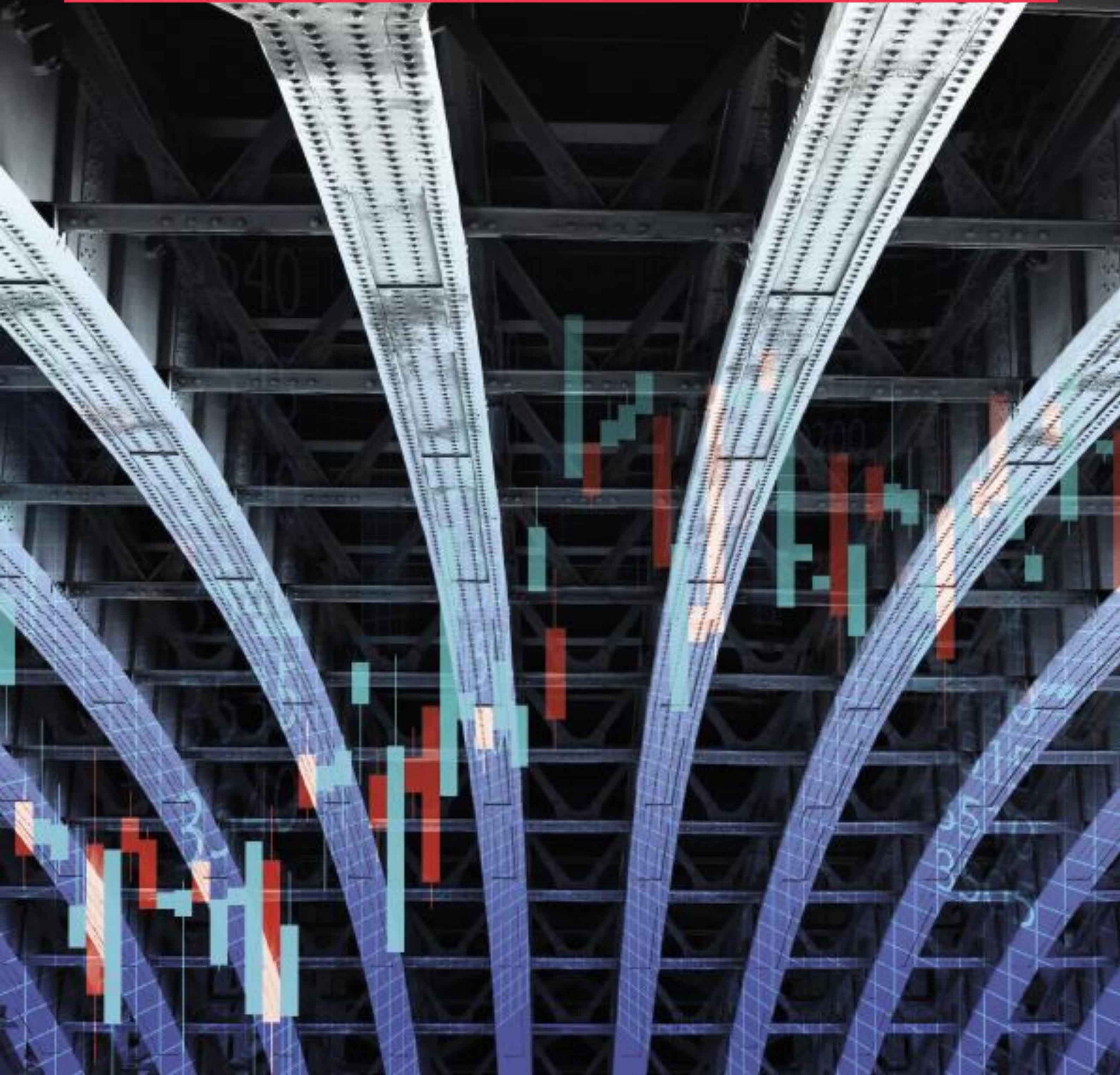
Jamie Turner
Chief Operating Officer & Head of Trading

cc: Board directors
All committees

LME White Paper on Enhancing Liquidity

September 2024

SETTING THE GLOBAL STANDARD



Contents

1 Executive summary

The LME is committed to modernising its market structure to enhance liquidity and broaden participation while protecting the unique features of its market, including the global relevance of LME prices and significant physical market presence within its diverse ecosystem.

Within this paper (the "**White Paper**") the LME is outlining its plans to implement a package of measures to enhance liquidity in the central electronic venue, increasing transparency and encouraging greater price competition. This will benefit both physical and financial end users and bring the LME further in line with the industry standard – while also supporting the overarching aims set out in its Action Plan to modernise and strengthen the LME markets to ensure they thrive in the long-term.

Following on from the successful introduction of the Additional VWAP Closing Price methodology in Q1 2024, this package of initiatives to enhance liquidity is the next major step in the LME's market modernisation journey.

The set of measures includes a liquidity provider programme, the introduction of block trade thresholds, new trading functionality, and market data changes. The measures complement one another and will be delivered as a package to maximise their effectiveness. Increasing centralised electronic liquidity aligns with the regulatory direction of travel, ensuring prices are as reflective as possible. This will benefit the market as a whole, and in particular end users, in terms of best execution.

The key objective is to motivate liquidity to the LME's central electronic venue, encouraging more price competition and greater transparency. These enhancements are underpinned by the LME's strategic principles of serving the physical market, ensuring fairness, increasing user choice and maximising trading efficiency. Furthermore, avoiding fragmented pools of liquidity, both in the inter-office market and the OTC market, aligns to the LME's core regulatory requirement to maintain fair, orderly and efficient markets.

The introduction of block trade thresholds will be focused on the most liquid instruments. They will initially apply to 3-month and the monthly contracts out to month 12 (and all spread contracts between these prompts). This will benefit all market participants who hold positions on these prompt dates by improving liquidity, in particular financials and large physicals but also many smaller physicals and any other end clients who hold monthly positions.

Supporting the physical market and maintaining the relevance of LME prices remains a key strategic focus. The LME will therefore ensure that block thresholds do not apply to the daily dates often used by the physical market, and importantly all cash outright trades will be outside of the new block requirements ensuring that small orders relating to physical averaging business can continue to be managed inter-office if so required.

The LME has heard demand from end users for the introduction of "micro" contracts. A prerequisite for successfully launching such contracts is deep liquidity in the underlying monthly futures contracts that the micros will reference. Similarly, the LME intends to launch electronic onscreen premium quoted options on the new trading platform, which will be significantly supported by enhanced liquidity in the underlying monthly futures.

The LME is cognisant of the impact that the proposed changes will have on members and clients, including execution process changes, and other potential system impacts such as changes to single dealer platforms. Hence the LME is publishing this paper as soon as possible to support engagement and discussion and to provide as much transparency as possible on the direction of travel for the LME market.

The package of measures is planned to be introduced in H2 2025, following on from the introduction of the new trading platform, leveraging new features such as additional good-till-cancelled orders ("GTCs") as part of this package.

A number of the proposed measures will be subject to consultation which will follow, likely in Q1 2025. The LME will also form a block trade working group in the coming months to seek input from members on the implementation details around blocks.

The exact sequencing and implementation timing will be confirmed after the consultation is complete in early 2025; it may be beneficial to deliver certain components of the package in phases depending on factors such as the technical delivery roadmap and any necessary regulatory approvals.

2 Background on enhancing liquidity measures

The LME remains committed to modernising its market structure and delivering greater standardisation where possible, to enhance liquidity and transparency in its market. In 2021, the LME Discussion Paper on Market Structure[1] (the "**Discussion Paper**") set out a range of proposals designed to enable the LME to modernise and adapt to emerging trends and evolving customer needs to create a metals market fit for the future.

The initial focus was on modernising the Ring and reference prices, an area in which the LME has made significant progress by moving Closing Prices to electronic determination in 2021 then working closely with the market to further evolve the methodology before rolling out the Additional VWAP Closing Price methodology in early 2024, providing a more transparent and deterministic industry standard methodology.

The next key area of focus is enhancing liquidity in the central electronic market due to the significant benefits it offers the market as a whole, in particular to end users. Central electronic liquidity is more transparent, facilitates greater price competition, and supports orderly trading. As such, the LME believes that overall, the market will benefit from the further encouragement of liquidity onto the central electronic venue.

A key recommendation in the Independent Review of Events in the Nickel Market in March 2022 ("**Independent Review**") was to "*over time, provide a clear vision of the future of market structure at the LME and LME Clear, including its venues, fee structure, clearing model and market access*" and to "*where possible – without significant loss of functionality to existing participants – commit to measures that would standardise the market structure with global peers to enable participation and consequent growth in liquidity*".

In March 2023 the LME published its Action Plan to Strengthen the LME Group's Markets (the "**Action Plan**"), in which it recommitted to the vision of the LME Group future market structure laid out in the 2021 Discussion Paper. The Action Plan is designed to strengthen the LME market but also to modernise by (1) enabling the market to provide deep and resilient liquidity for LME participants and (2) evolving the market structure, demonstrating the Group's ability to deliver modernisation and change.

In this White Paper, the LME provides detail on the set of initiatives to enhance liquidity in the central electronic market – which is the next stage in its vision for market structure modernisation that was originally outlined in the Discussion Paper and recommitted to in the Action Plan.

---

[1] See Discussion Paper Outcomes document in LME Notice 21/111.

Throughout this White Paper the LME has provided information which it considers to be relevant to each topic, including its own position in key areas, to assist stakeholders in understanding the proposed direction of travel. A number of potential initiatives discussed in this White Paper will be subject to consultation. The purpose of this paper is to provide a clear and cohesive explanation of the full package of measures the LME intends to implement to support the market in preparing for the proposed changes.

It should be noted that this paper is focused on enhancing liquidity in the core LME base metal contracts. In particular, block rules are likely to apply only to the base metals the LME deems sufficiently liquid. Block thresholds are not focused on the cash-settled futures contracts, and other more nascent LME contracts where block thresholds may not be appropriate given their stage of development and the need to support bilateral execution while initial liquidity develops.

The LME welcomes any views on any area of the White Paper; however, it should be noted this is not a discussion paper nor a consultation and there are no defined questions to respond to nor timeline to provide feedback. The topics covered in this White Paper will continue to be discussed at the User Committee, other committees and working groups and with the broader market as a whole via any relevant future consultations. Some topics may be subject to further regulatory approvals.

3 Objectives of enhancing liquidity

LME position - *key objectives*

- Motivate liquidity to the LME's most transparent venue and encourage price competition
- Increase transparency
- Continue to support the physical market
- Ensure fairness

Motivate liquidity to LME's most transparent venue and encourage price competition

The key objective of the LME's package of measures is to increase liquidity in the central electronic venue which will ultimately improve the bid-offer spread and support better execution for end clients. Maximising centralised liquidity is also aligned to the LME's core regulatory requirements to maintain fair, orderly and efficient markets and to ensure orderly pricing and effective settlement of contracts.

The goal of a market infrastructure provider is to centralise liquidity and provide the golden source for price information for a particular instrument. This provides trust and reliability in the ability to transfer risk. Multiple pools of liquidity (including OTC) detract from this, with information not equally available to all participants. It also reduces end users' ability to access all available liquidity and can create a barrier to entry for new liquidity providers.

The regulatory direction of travel has long been towards less fragmentation of liquidity and towards execution on transparent centralised electronic venues as it improves price formation and market integrity.

- The 2001 IOSCO report on transparency and market fragmentation stated that *"**To the extent that competition in the provision of trade execution services fragments a market, regulators need to consider the adequacy of the transparency arrangements for individual 'trading venues'[...].***

This is important not only to optimizing trading opportunity but also to the maintenance of efficient pricing*"*[2]

- The G20 commitments from 2009 state that *"**all standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate[...]**"*[3]

- An FCA speech from 2014 describes the benefits of increased price competition as offering *"**a reduction in transaction costs and a facilitation of best execution**"*[4]

- The recent FCA consultation CP 23/32 stated that *"**greater transparency leads to more liquidity, increased competition among dealers, and improved access to better prices by less sophisticated investors**."*[5]

- CP 23/32 also explains the FCA's objective in terms of consumer protection stating that improving derivative transparency *"**will improve consumer protection by allowing investors to access all available liquidity at the best possible price. It will also allow investors to better assess the quality of execution outcomes.**"*

Increase transparency

The move towards greater transparency in financial markets has continued and is as important as ever. Transparency is a key facet in ensuring fairness in the LME market and is crucial in maximising trading efficiency for participants by increasing available liquidity and participation in LME markets.

The LME believes – in line with the regulatory direction of travel outlined above – that transparency supports greater price competition and best execution, which ultimately benefits the market as a whole. It is also of the view that its market structure should not incentivise nor support trading moving to less transparent venues purely to avoid transparency and price competition.

There are of course scenarios, such as where very large trades are executed, that it can be argued that some delay to transparency is beneficial to participants providing liquidity and taking risk – and this leads to better prices for end users. This approach is utilised in the LME options market where there exists a large-in-scale ("**LIS**") transparency waiver to support liquidity provision in large sizes.

Where trades are not large, complex nor non-standard, the LME is of the view that it is beneficial to the market as a whole to ensure that, where possible the playing field is as level as possible in terms of transparency across the central limit order book, the inter-office market and the OTC market.

Continue to support the physical market

The LME remains committed to serving and supporting the physical market; the relevance of LME prices in physical contracts is fundamental and the participation of the physical community in the LME ecosystem is a key strength. There are unique features of the LME market that attract physical participants – including the fact the LME determines a daily Cash Official Price used in many physical supply contracts and referenced in averaging contracts.

---

[2] https://www.iosco.org/library/pubdocs/pdf/IOSCOPD124.pdf
[3] https://ec.europa.eu/commission/presscorner/detail/fr/MEMO_12_232
[4] https://www.fca.org.uk/news/speeches/price-cornerstone-markets
[5] https://www.fca.org.uk/publication/consultation/cp23-32.pdf

In considering and designing any potential market structure reforms, the LME is cognisant of any potential impact on the physical market. It should, however, be noted that in many cases physical participants do also hold exchange positions in monthly prompt dates, and therefore will also benefit from any increase in price competition and transparency as liquidity in the central electronic market deepens. In some detailed areas later in this White Paper, the high-level solution design has considered and looked to protect the unique features that support the physical market such as ensuring certain spread trades between daily dates are exempt from block trade thresholds.

Ensure fairness

When looking to achieve the benefits of greater participation in the central electronic market, using a combination of incentives and rules, there exists a risk that the approach could have unintended consequences such as driving more volume towards the OTC market – further reducing transparency and negatively impacting the orderliness of on-exchange trading and the representativeness of pricing. With the growth of electronic liquidity, the LME also wants to ensure that it encourages positive behaviour from algorithmic traders and may make changes to rules and market microstructure to support this, such as recalibrating tick sizes for spreads. Where possible, the LME has looked to ensure that the overall package of measures includes mitigants against any significant potential unintended consequences.

4 LME venue structure

LME position

- The central electronic venue – LMEselect – represents the most transparent venue with maximum price competition
- The LME has a very low share of electronic volume relative to most peer venues, this fragmentation of liquidity has negative consequences
- The inter-office market will continue to be important for large or complex orders and complements the central electronic venue
- Supporting the physical market remains a key strategic objective and any changes will be designed accordingly

On the LME market only 48%[6] of total volume was executed on LMEselect in 2023. This is very low relative to most peer markets, where for the most comparable commodity futures contracts they often see greater than 95% of trading on the transparent central electronic venue.

There are a number of drivers behind this, relating to the LME date structure, member intermediation supporting clients in holding positions in the monthly contracts, the fragmentation of liquidity across member platforms, and the way the market evolved historically to service clients bilaterally. The LME ruleset also encourages this by allowing any size of trade to be bilaterally negotiated away from the central electronic venue and booked as an exchange contract (which is not the case on most peer markets). This fragmentation of liquidity means that not all participants have equal access to pricing, nor equal access to the most relevant information on prices.

The other key factor – that is both a cause and effect of this – is the quality and consistency of liquidity in the central limit orderbook itself. Because of the dispersion of liquidity provision and the asymmetry of information

[6] Full year 2023 volumes, normal member-to-member trades, client normal and give-up crosses.

that the market structure creates, end users often execute bilaterally with members. There are of course many other factors that determine how and where end users execute, such as the overall service members offer, front end technology offerings, the ability to take on risk, and knowledge and expertise around execution on the LME market.

The LME is of the view that for smaller sized orders, where end users are looking for positions in the most liquid standard monthly contracts (or spreads involving them), LMEselect represents the most appropriate, transparent and competitive execution venue. Of course, not all clients are able to execute directly on the electronic venue themselves. Where clients prefer to continue to use the execution services provided by members to trade small sizes, the LME believes the member should directly execute the order on LMEselect on behalf of the client to support best execution.

The pooling of liquidity in those standard instruments will ultimately lead to more price competition and transparency for the market as a whole. The LME has already seen this take place for the 3-month contract itself. In 2023, 85% of outright 3-month volume was executed on LMEselect. This has led to positive benefits for the market as all stakeholders have visibility of the latest price information and executing on LMEselect ensures orders are exposed to a deep centralised pool of liquidity that all participants can access.

Despite the 3-month date being the focal point of liquidity, when looking at open interest on the LME market, 75% sits on the monthly dates. This number is even higher for end clients' open interest. The LME is therefore of the view that trading in the first 12 monthly contracts (and in spread trades between them and between them and 3-month) is an area that will see the most benefit from a significant increase in the proportion of electronic trading. It should be noted that the LME is of the view that in the long-term blocks are likely to apply to all monthly contracts.

Despite the majority of open interest sitting on the monthly prompt dates, only 2% of volume in the monthly contracts is executed on LMEselect. Looking at the spread volume from 3-month to monthly dates (and between monthly dates) at the front of the curve – only 42% is executed on LMEselect. This number also overestimates the electronic proportion, because the current market structure means that many spread trades from 3-month to monthly dates are internalised by members and so are never booked or made transparent to the market.

It is important to acknowledge that as a result of the proposed changes in this White Paper some end clients may choose to execute directly in the monthly contracts rather than via the 3-month contract. Over time, there is a possibility that this could lead to a more general move towards a monthly contract becoming the key liquidity point on the LME, much like the "active" month on peer exchanges, and a consequential reduction in interest in trading the 3-month contract.

The LME is of the view that such a shift, if it were to happen, would not undermine the daily date structure itself, which is ultimately driven by end client demand to hold positions on specific dates (rather than residual open interest) and the LME is confident that clients will continue to benefit from the excellent service members provide in this regard.

The LME remains of the view that the inter-office market is an integral part of the LME ecosystem, which supports the execution on non-standard prompt dates (other than the monthly dates and spreads involving them), and larger sized trades.

Transparency in the inter-office market is, however, crucial, and the LME believes wherever a member is executing with a client – and transferring risk – this information should be available to the entire market as soon as possible. This avoids asymmetry of information and negative network effects that can mean members with more flow have more information which in turn can become a barrier to entry for new liquidity providers.

The LME remains committed to the principle of user choice, and therefore is proposing a package of initiatives that meets the core objectives outlined in section 3 above, while supporting members and clients in being able to continue to negotiate trades for outright monthly and 3-month contracts of any size bilaterally in the inter-office market, providing they cross such orders through the central limit orderbook. This type of orderbook crossing is standard on many peer markets.

Members and clients who are already trading outright monthly contracts and executing directly on LMEselect would see the benefits of increased liquidity, directly and via implied pricing as more 3-month to monthly spread orders will be exposed to LMEselect and executed electronically.

Clients who prefer to execute in 3-month and then adjust to a monthly would be able to continue to do so directly in LMEselect or on an agency basis with members. More details on the proposal is set out in section 5.2 below – but, in summary:

- For small trades[7], the member will be required to execute the client's trade on LMEselect (on an agency basis) either trading with the existing liquidity or crossing it in LMEselect with their own liquidity provision, obeying a set of crossing rules. This will ensure that all trades have complete practical transparency (see section 5.2.3 below).
- For large trades (or prompt dates where the block thresholds do not apply), there will be no requirement for the member to execute or cross via LMEselect; however, all components will need to be booked into LME systems (including the spread from 3-month to the monthly if executed with the client in this manner – if the client simply agrees the monthly price then the monthly just needs to be made transparent). This will support the LME in auditing that inter-office trades adhere to the new ruleset but will also support publication of all client-to-member risk transfer on the core market data feed, regardless of the trade size (see section 5.4.2 for detail on additional LIS).

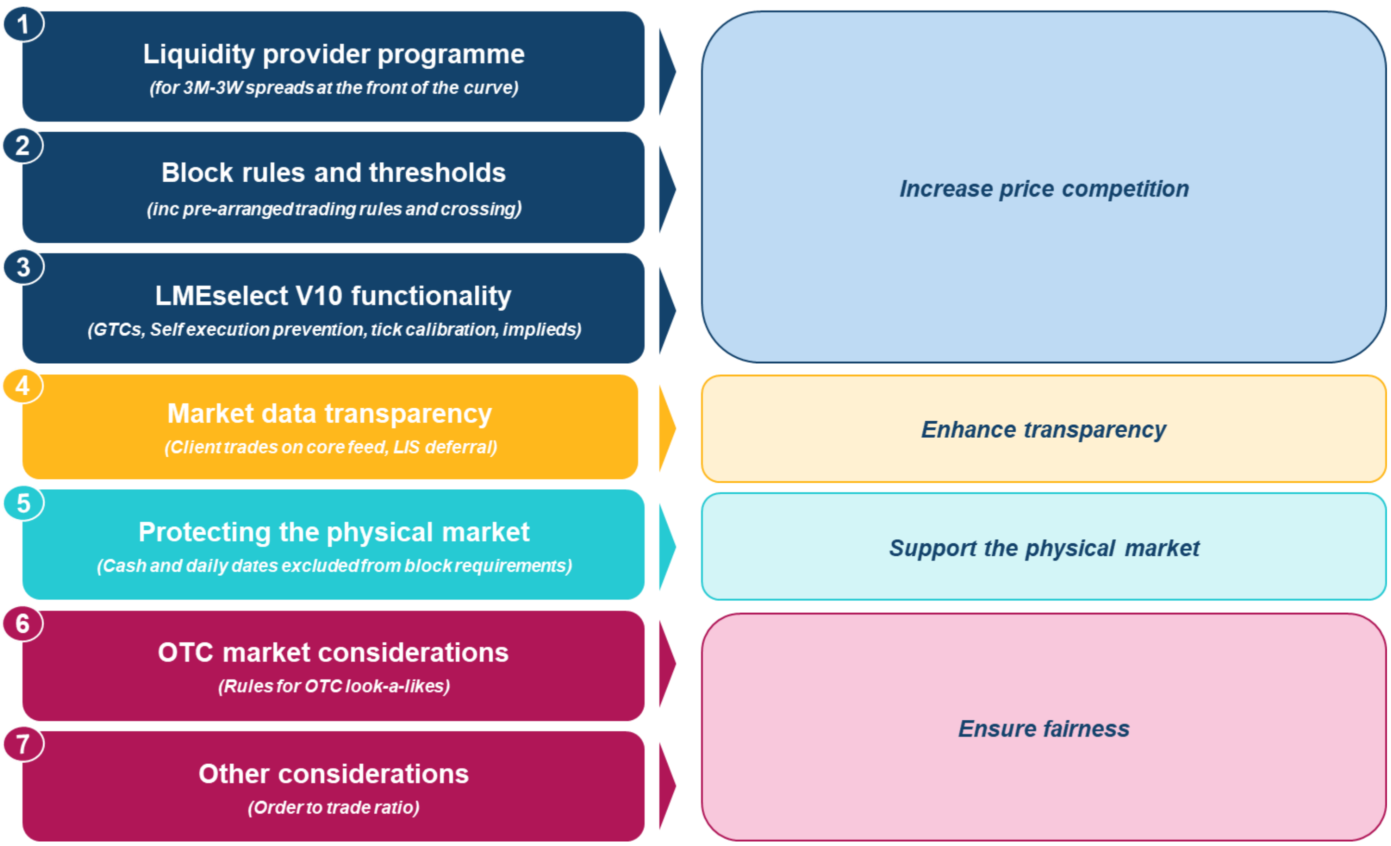
The Ring remains the price discovery venue for the Official Settlement Prices, and the LME is not currently proposing to change that as part of this package of measures to enhance liquidity. As noted in the outcomes of the Discussion Paper (LME Notice 21/111) there was a "preference from many smaller physical participants who use the LME to hedge their physical supply contracts, to retain Ring trading and pricing" which led to the hybrid approach where Official Price discovery remains in the Ring. While Ring trading naturally has less direct participation than LMEselect (currently only 7 Ring members), the pre- and post-trade practical transparency of the Ring is greater than the inter-office market – and therefore the LME does not intend to introduce block trade thresholds on Ring trading[8] at this time. However, it should be noted that it will not be possible to use the Ring to cross trades which have been negotiated in the inter-office market below the block trade threshold, and the LME will monitor to ensure no avoidance of the overall block requirements occurs in relation to Ring trading. The mechanism remains in place whereby if certain criteria (outlined in LME Notice 21/153) are met then the LME would be permitted to move Official Prices from being Ring-derived to being permanently electronically derived without further consultation. The LME will, of course, look to work with Category 1 members to ensure that its Ring strategy is aligned with the broader evolution of the market, including arising from this White Paper.

[7] Generally exchanges calibrate block trade thresholds based on what can reasonably be executed on the central electronic venue, small trades therefore refers to trades below the block trade threshold.
[8] Including basis Ring trades.

5 Package of measures to enhance liquidity

LME position

- The LME believes a combination of measures, delivered together, will be the most effective way to enhance liquidity in the central electronic market
- A liquidity provider programme focusing on key spreads at the front of the curve will provide liquidity for those looking to trade directly on the central venue
- Block trade thresholds will ensure small orders go through the central venue and are exposed to maximum competition
- New functionality in the trading platform such as tick size differentiation, self-execution prevention and more implied pricing will further support electronic liquidity provision
- Ensuring all risk transfer trades are published on the core market data feeds will maximise transparency and avoid information asymmetry that can act as a barrier to entry
- Where possible, all initiatives should ensure a level playing field between on-exchange trading and OTC – especially in terms of transparency, to avoid any further fragmentation of liquidity



5.1 Liquidity provider programme

LME summary

- The LME believes directly incentivising liquidity on LMEselect, in certain key instruments will support end users who want to directly trade on the electronic market
- The programme will initially focus on the spreads from 3-month to the nearby monthly dates and some monthly-to-monthly spreads, directly supporting liquidity in these instruments and indirectly supporting liquidity in the monthly outright contracts via implied pricing
- More consistent onscreen liquidity will support the introduction of block trade thresholds by allowing small orders below the threshold to be directly executed onscreen

The LME's market structure leads to a fragmentation of liquidity in certain instruments outlined in section 4 above: many clients hold positions in monthly prompts; however, the focal point of liquidity is in the 3-month prompt. The current market structure allows members to intermediate this and internalise the adjustment spreads from 3-month to the monthly, the result of which is that pricing for these instruments is less consistent onscreen and less transparent.

The LME therefore believes it would be beneficial to incentivise liquidity for these instruments at the front of the curve where most open interest sits, likely via the 3M spreads to months 2, 3 and 4 ("M2, M3, M4"). The LP programme will also include some monthly-to-monthly spreads to support key position rolls (for example M2-M3 and M3-M4).

This will directly increase liquidity and transparency in the 3-month to monthly spreads themselves but will also indirectly increase the liquidity – and consistency of liquidity – of the monthly outright contracts via implied pricing. Implied pricing functionality in the current trading platform (LMEselect v9), combines outright orders in the 3-month orderbook, with spread orders in a 3-month to monthly orderbook, generating tradable outright orders in the monthly outright without legging risk. This functionality was initially launched in 2018 and has led to a significant growth in monthly outright volumes. However, in absolute terms the volume in monthly contracts still remains low (see section 4 above), and one of the key limiting factors is the inconsistency of liquidity on LMEselect in the related spread instruments.

The detail of the LP programme, subject to regulatory approval where required, will be announced via Notice in due course. It is the LME's intention for the programme to apply to Aluminium, Copper, Zinc, Nickel and Lead with consideration for some incentivisation during Asian hours trading if possible. The LME reserves the right to alter the parameters of the LP programme to incentivise liquidity as deemed appropriate. This includes the potential for directly incentivising monthly contracts should market conditions, demand and liquidity support such a change.

Increasing onscreen liquidity in these key instruments, that align to where most open interest is ultimately held, will support participants that choose to execute smaller sized clips directly on LMEselect themselves, and those that choose to access the market via a member's execution services. Where members look to cross trades through the central limit orderbook, greater two-way liquidity can lead to immediate price improvements and helps support best execution.

The LME invites any participants willing to be a part of the LP programme to respond to the Notice once published in due course. The LME's current intention is for the LP programme to go-live with the other enhancing liquidity measures in H2 2025 (subject, where required, to consultation and regulatory approvals).

5.2 Block trade thresholds and crossing rules

LME summary

- The LME believes that introducing block trade thresholds will enhance liquidity in LMEselect and support more price competition, and better align with peer venues to the benefit of end users
- Block trade thresholds would apply to 3-month outright, monthly outrights (initially to month 12) and spreads where both legs are one of those prompts
- The LME is minded to apply a consistent block threshold level across all applicable metals and apply it to each leg of a spread trade
- The LME will introduce crossing rules to support members in continuing to provide liquidity in small trades and cross them through LMEselect
- All inter-office client trades will need to be booked in LME systems in the exact instruments traded

Note: the operational details around the blocks solution will be discussed in further detail with members in the forthcoming Blocks Working Group

5.2.1 Block trade thresholds

It is common for futures exchanges to describe block trades as trades nominally above regular market size that are privately negotiated outside of the electronic order book before being registered with the exchange, usually with a short delay of a few minutes. For the LME this description has parallels with the inter-office market; however, in the inter-office market trades of any size can be executed, as currently there is no minimum size requirement. This is at odds with other established markets. Most peer venues have block thresholds which help drive volume to the central venue, with one directly relevant peer venue going further and only allowing electronic trading.

As outlined in section 4 above, the overall set of initiatives proposed in this White Paper will increase transparency in two key ways; (1) introducing block trade thresholds so more small trades are executed on the most transparent venue and (2) for all inter-office trades in these liquid instruments, ensuring that practical transparency is maximised and they are published on the core market data feeds.

Purpose of blocks

Transparency in financial markets refers to the availability of information to regular users of the market – transparency concerning the orders that lead to a trade and the post-trade execution details provide the information that delivers the ability to make informed decisions. Transparency is a key objective of the overall package of measures to enhance liquidity, giving all participants confidence in liquidity, and ensuring equal access to information.

In most markets the electronic central limit order book is a transparent mechanism for risk transfer for normal market size trades and the vast majority of volume is executed onscreen, however there will be circumstances where larger size trades than are normally executed in the central venue are demanded. It can be beneficial for participants to execute such orders bilaterally, where liquidity providers can intermediate and take on the execution risk. This can provide better executions for clients where, for example, simply entering the large order into the central venue may have had a significant impact on the price of the instrument. In this way a bilateral block trading mechanism (or the LME inter-office market) with appropriately calibrated thresholds can support the orderliness of trading by reducing the potential impact of large orders on price in the central electronic venue. However, if block trade thresholds are calibrated too low then too much volume will migrate to bilateral trading and the overall liquidity and transparency of the market will be negatively impacted. This is why the LME believes it will be beneficial to introduce block trade thresholds for its most liquid base metal contracts.

This approach should improve price discovery and deliver greater appetite for providing liquidity to the central electronic venue. The introduction of block trade thresholds for certain instruments therefore complements the introduction of an LP programme, by ensuring liquidity pools onscreen and all liquidity providers have equal access to information on most normal sized trades.

Background on blocks

Generally, block trades represent <5% of total traded volume for peer commodity exchanges; the LME market trades more than 50% inter-office. Most other markets are predominantly electronic and therefore have generally been discussing the value of allowing any block trades at all and the risks that poses to liquidity in the central venue. The LME is conversely starting from a place where the majority of volume trades off book, and therefore is looking at the positive effects on liquidity in the central venue of introducing block trade thresholds.

One of the most comprehensive, data driven analysis of block trading practices in recent years was conducted by the CFTC, published in October 2018[9]. When looking at the agricultural derivatives listed on the CME over a nine-month period, the total percentage of volume executed via block trades was 0.19%. The report was drafted over concerns over possible increasing percentages of block trading occurring in these markets, with the CFTC noting:

"Block trading is an important issue for the CFTC because of DCM Core Principle 9 of the Commodity Exchange Act which states that "[t]he board of trade shall provide a competitive, open, and efficient market and mechanism for executing transactions that protects the price discovery process of trading in the centralized market of the board of trade."

Prior to the CME's expansion of agricultural block trading, the CFTC heard various concerns from some members of the industry – most importantly, that block trades could reduce liquidity from the central limit order book ("**CLOB**") and could reduce price transparency.

There is little in the way of published guidance from the UK regulatory bodies, with a 2021 definition in the FCA Handbook describing Exchange block trades as *"a bilateral trade in relation to an exchange-traded instrument between counterparties that takes place off-exchange because the size of the trade exceeds certain specified levels. In some cases, the exchange may provide communications functionality to facilitate the block trades, but the trades are not executed on the exchange's public market."*

As stated in section 4, the LME is of the view that the inter-office market will continue to be important for trades over the proposed threshold[10] or complex orders and will continue to complement the central electronic venue. However, the LME believes that the introduction of block trade thresholds for certain instruments would be beneficial to ensure trades below the threshold are exposed to the higher level of transparency and price competition on the central limit order book.

---

[9] https://www.cftc.gov/sites/default/files/2018-10/DMO_abta1018.pdf
[10] The inter-office market also remains crucial for all the instruments and other metals for which block trade thresholds do not apply.

High level solution overview

The LME is proposing to implement block trade thresholds that will apply only to monthly outright (or 3-month) contracts out to month 12 initially, and any spreads where both legs involve a monthly contract out to month 12 or the 3-month contract. This aligns to the feedback received on the topic of blocks in the Discussion Paper in 2021, some of which suggested blocks should only apply to more liquid instruments that can more realistically be executed on the central electronic venue.

- All monthly and 3-month outright trades out to month 12 (including spreads between these prompts) below the block size threshold, will have to be executed on LMEselect or crossed through LMEselect.
- This will apply to member-to-member trades and member-to-client trades. This will apply to Aluminium, Copper, Zinc, Nickel and Lead (futures only, not LME Options[11] TAPOs, MAFs etc).
- Where a client wishes to access liquidity via a member's execution services (rather than the client directly accessing LMEselect), and the client is looking to execute a trade below the block threshold the member can either:
    a) Work the client order in LMEselect on an agency basis:
        1. In the exact instrument(s) for which the client wishes to hold the position, or,
        2. As separate orders for component parts and execute all components on LMEselect.
    b) Give the client an indicative price subject to crossing it through LMEselect, then cross the order (at a "clean" price) through LMEselect in the exact instrument(s) with the client side exposed first (see crossing rules section below) and hold onscreen for a short period (likely 5 seconds) before entering the house side to create a cross trade. Once the crossing is completed in LMEselect (1-3 below) the member can then add in any previously communicated markup onto the price of the resulting inter-office booking (the so called "dirty", or "all-in" price). This leads to four potential outcomes:
        1. Where the client receives an immediate improvement due to a better price available in the CLOB.
        2. Where the client is executed against other liquidity on LMEselect (with no improvement) before the quoting member can execute the cross.
        3. Where the quoting member completes the cross filling the client order.
        4. Where the market moves to such a point that the member is unable to complete the cross, and the client order is not able to be filled. The member will have to re-quote or work an order for the client in LMEselect.
- Members can undertake the above styles of execution on behalf of the client for multiple linked trades, which are then amalgamated for the final allocation into the client account. For example, the client may choose to work an order in 3-month, after which is filled, they get an indication from the member on an adjustment to a monthly contract, which is then crossed through the orderbook. All component parts have been made transparent and can be amalgamated in order to allocate only the resulting monthly contract into the client account.
- Trades above the block trade threshold must be booked within the 10-minute requirement in the "shapes" that they are traded. For example, if a client trades 50 lots of 3-month, and then adjusts to a monthly contract, both against a member's proprietary liquidity provision, then these two component parts must separately be booked in LME systems to be made transparent to the market.

  The LME will create appropriate rules and monitoring related to trading activity in the inter-office market to ensure that block rules are not intentionally avoided or circumvented (such as by splitting a 3rd Wednesday to 3rd Wednesday spread trade into two separate trades the combination of which is equivalent to a 3rd Wednesday to 3rd Wednesday trade).

---

[11] The LME's intention is that for LME Options, delta hedges booked at the same time will not be subject to the futures block trade thresholds.

Calibration of block trade thresholds

The LME has been assessing the most appropriate calibration methodology for the proposed block trade threshold. This process considers quantitative analysis on metrics such as average trade size and liquidity in the orderbook, but also qualitative considerations. In particular the LME has considered the need for simplicity and consistency in the approach and therefore is currently minded to implement the block trade threshold at 10 lots for all metals for which it applies. For spread instruments, each leg will have to meet the threshold in order to be accepted.

The block trade threshold values would be confirmed prior to implementation should the LME proceed with the proposal (subject to consultation and any necessary regulatory approval); however the LME believes it appropriate to include this indicative level in the White Paper to support the market in considering and preparing for this potential change.

Additional rules to support block thresholds

As part of the introduction of block trade thresholds, the LME will consider whether any additional rules are required alongside potential changes to the existing rulebook and matching rules. Any such changes will be subject to consultation. This will include an assessment of rules relating to single dealer platforms, multi-dealer platforms and electronic matching for inter-office contracts, as well as matching times and other areas such as enforcement.

Fees[12]

On most peer venues bilaterally negotiated “block” trades have a higher fee than trades executed in the central electronic venue, this generally reflects the lack of transparency and increased oversight required. The LME is not at this time proposing such a fee differential. The LME will however continue to consider whether such a fee differential for inter-office trades would be beneficial for the market and the overall objectives of the package of measures to enhance liquidity.

5.2.2 Crossing rules

Alongside the introduction of block trade thresholds, the LME also intends to introduce pre-execution communication or “crossing” rules. These will outline the ability to “cross” orders through LMEselect under certain circumstances. This aligns to most peer markets which have mechanisms by which trades can be bilaterally negotiated, and then exposed to the central electronic venue to maximise price competition and transparency.

The initial solution is likely to be rules based, whereby a member can give an indicative price to a client bilaterally (even below the block threshold size). If the client would like to trade at this price, then the member can enter the client’s order (at a “clean” price, not including commission, credit charges etc) onscreen for a minimum period of time (a small number of seconds). If the order does not execute on LMEselect within this small time window then the member can place a house order in the opposite direction generating a cross trade and filling the client’s order.

Where the member enters the client’s order and it immediately executes at a better price due to onscreen liquidity present in the orderbook, then the client will receive this improvement, thus this solution can lead to immediate pricing benefits for end clients where bilateral quotes are outside of the onscreen best bid and offer.

[12] This section only refers to exchange and clearing fees.

The crossing rules will also support member-to-member bilateral trading in sizes below the block trade threshold level.

In the long term the LME will consider more complex order types that could support such execution by allowing bilateral trades to interact with the CLOB orders or auction type solutions that could lead to further price improvements.

5.2.3 Ensuring all risk transfer activity is transparent to the market

It is crucial that all trades executed in the inter-office market are booked into LME systems in a timely manner, and in a way that captures all relevant information. As outlined previously, there are certain trade flow scenarios where members execute bilaterally with clients but the exchange, and the broader market does not have visibility over all elements of the executions.

For example, a client undertakes a 3-month trade with their member then subsequently (potentially immediately) adjusts this from 3-month to December 2024 (effectively by undertaking a spread trade). In this scenario, often only the resulting December 2024 outright position is booked into the client account. Depending on how and if the member has hedged any components of this risk on LMEselect or other venues the broader market may have limited visibility of the risk transfer and pricing that actually took place, and the LME itself may only see the outright positions in its systems at different times.

The introduction of block trade thresholds would mean that for inter-office trades below the threshold, all components would need to be booked or crossed through LMEselect. This would achieve the aim of ensuring transparency for all risk transfer trades and would ensure the LME has appropriate oversight of all relevant information.

For trades above the block trade threshold (and for prompts where blocks do not apply), the LME will require that for all client executions there is a published trade in the exact instruments that are executed. In the example scenario above, if the 3-month trade has a trade size greater than the block trade threshold, then the member would need to ensure there is a booking into LME systems that publishes this in a timely manner to ensure appropriate visibility and complete oversight of genuine risk transfer (subject of course to any applicable post-trade transparency waivers).

5.2.4 Member working group

The purpose of this White Paper is to outline the LME's position in relation to the potential implementation of block trade thresholds. The high-level solution design is shared to support participants in understanding how the LME envisages such a solution may be implemented; however, this proposal is subject to change.

The LME is conscious that the implementation of blocks will have an impact on member and client execution models and systems, and there are many detailed workflows and trade flow examples that need to be discussed and considered in relation to the potential implementation of blocks.

The LME is therefore aiming to establish a Blocks Working Group ("**BWG**") to discuss the detail around the potential implementation of block trade thresholds and welcomes volunteers from any members interested in participating.

5.3 LMEselect v10 functionality

LME summary

- GTCs on spreads will support liquidity on LMEselect
- TAS markets will allow small sized orders to be transacted against Closing Prices
- The LME believes that changes to the tick sizes for spreads will help avoid some negative algorithmic trading strategies
- The LME intends to deliver self-execution prevention technology to support electronic provision of liquidity
- Enhanced implied pricing will generate additional liquidity in spreads

The new trading platform, LMEselect v10, will deliver a more deterministic low latency trading platform with additional functionality which helps support electronic trading. While the core of this package of measures to enhance liquidity is not dependent on any future trading platform enhancements, there are a number of future features that are noted in this section that once introduced will complement the overall LME offering for those participants looking to trade in the central electronic venue.

5.3.1 Good-till-cancelled orders *(day 1 functionality)*

One of the key functional deliveries from the new trading platform, will be the ability to enter good-till-cancelled ("**GTC**") and good-till-date ("**GTD**") orders, together referred to as ("**persistent**") order types for all instruments. This will support electronic liquidity by allowing participants to place GTCs in orderbooks that remain in the system indefinitely.

In the current version of the trading platform, LMEselect v9, persistent orders are only supported in the 3-month or cash outright prompts. This is due the complexity of where the 3-month date lies on the same prompt date as a monthly prompt date (so called "merged orderbooks").

The new trading platform has been designed such that on a day where there is a merged orderbook, persistent orders in each underlying instrument will be able to interact and match (maximising liquidity), then the next day when the prompt dates de-merge all persistent orders will continue in the original instrument for which they were entered. More details can be found in the LMEselect v10 functional definition document on the website.

The LME believes enabling persistent order types, in particular for spread contracts, will have a significant positive impact on the liquidity that builds and persists on LMEselect. This will be delivered within the day 1 scope of the new trading platform.

5.3.2 TAS markets *(follow-on functionality)*

Trade-At-Settlement ("**TAS**") contracts allow trading against a future (but currently unknown) reference price. They are common in many peer markets, and allow participants to submit orders and trade at positive and negative prices (which then translate into a premium or discount to the eventual reference price). For example, if a participant buys a Dec24 copper Closing Price TAS at negative $0.5, then once the Closing Price has been established, they will receive a Dec24 outright Copper position at the Closing Price minus $0.5.

The LME has previously seen trading in a Nickel 3-month TAS contract which referenced the Closing Price. The new trading platform will enable the LME to launch TAS contracts in a much wider range of instruments. These TAS markets will allow participants to hedge smaller orders against the Closing Prices, in a similar manner to the way that market-on-close orders are currently utilised.

5.3.3 Tick sizes (follow-on functionality)

In incentivising more electronic trading it is important that the market microstructure is supportive of “positive” behaviour from systematic / algorithmic traders. Correctly calibrated tick sizes is a key component of this for the LME market. The LME recalibrated the outright tick sizes in 2015 (from $0.01 to $0.50 or $5.00) and is comfortable they remain effective in encouraging pooling of liquidity and avoiding negative behaviours while not restricting price discovery.

The LME is however of the view that for most spreads, the current tick size ($0.01) is too small. This is a topic the User Committee have discussed, and the LME has been working on for some time. Because some very short-dated spreads such as tom-next require the granularity of $0.01, in the current system all spreads have to be calibrated at this level. However, this tick size could be considered too small for monthly-to-monthly spreads. This manifests in issues where some algorithmic trading strategies incrementally improve in very small amounts on existing orders in the orderbook providing the impression of low levels of liquidity at the top of the order book. This scenario is sometimes described as “jumping in front”.

The LME is of the view that correct tick size calibration is the most appropriate solution to mitigate the risk of such negative trading behaviours by ensuring that any price improvement needs to be more meaningful.

On the current version of LMEselect v9 there are limitations in how tick sizes can be calibrated across different prompt dates. This is complicated by the date structure and the rolling 3-month prompt. The system needs to ensure that it is not possible for an instrument to have a smaller tick size, then roll into something that has a larger tick size as existing orders would be rejected. The new trading platform, LMEselect v10, will allow the LME to deliver a solution to support tick size differentiation as a follow-on addition after launch.

High level solution overview

On the new trading platform, as soon as practicable, the LME will look to amend the tick size for any spread where both legs are either monthly dates or the 3-month less granular. An indicative summary of the proposal is provided below.

Current tick sizes

Metal	Outright	Carries
Aluminium	0.50	**0.01**
Copper	0.50	**0.01**
Zinc	0.50	**0.01**
Nickel	5.00	**0.01**
Lead	0.50	**0.01**
Tin	5.00	**0.01**

Potential carry tick size changes

Metal	Any 3m-3w or 3w-3w carry	Non 3m-3w or 3w-3w carry, within first 90 days*
Aluminium	**0.25**	**0.01**
Copper	**0.25**	**0.01**
Zinc	**0.25**	**0.01**
Nickel	**2.50**	**0.01**
Lead	**0.25**	**0.01**
Tin	**2.50**	**0.01**

** Within the 3-month date, this may be greater than 90 days*

5.3.4 Self-execution prevention *(follow-on functionality)*

Self execution prevention (“**SEP**”), also known as self match prevention (“**SMP”**) is a functionality native within an exchange matching engine that allows participants to prevent trade executions within the same legal entity, or group. This is important for electronic liquidity providers who may update quotes quickly when new information arises and therefore risk trading against their own orders where they are quoting two-way markets.

The LME has included SEP within the design of the new trading platform, to be provided as a follow-on deliverable to support the package of measures to enhance liquidity.

5.3.5 **Implieds between spreads** *(follow-on functionality)*

In November 2018, the LME launched implied pricing on LMEselect for base metals. This functionality enables orders in the liquid 3-month contract to combine with orders in the 3-month to 3rd Wednesday spreads and imply orders into the 3rd Wednesday outright contracts. This functionality improves access to existing liquidity and has been a key factor in the growth of monthly outright volumes on LMEselect.

The LME is minded to extend the implied pricing functionality to allow implied orders between spreads, for example where resting bids are in LMEselect for Jan-Feb at -5 and a Feb-Mar at -4, if the Jan-Mar implied route was enabled then a Jan-Mar implied bid of -9 would be created. This increases the available liquidity in the orderbooks and can reduce execution costs in some cases (e.g. in the above scenario should a participant want to execute the Jan-Mar spread only one trade is required where the implied route is enabled).

Implied pricing is a powerful tool; however it comes at a cost in terms of computation and the generation of order messages and market data updates. The LME is therefore minded to configure implied functionality between spreads for a limited number of spread routes at the front of the curve only; this is likely to align with the LP programme quoting requirements.

Enabling implied pricing between spreads is not within the day 1 scope for the new trading platform so this will also be a follow-on deliverable.

There are other ways in which implied pricing could be enhanced in the future, such as creating second, third or fourth order implied prices by using an implied order and combining it with other orders (often referred to as "chaining"). This can lead to an exponential growth in the number of orders generated and can be computationally very intensive. This could also exacerbate the "flickering" issues that can result from implied pricing, because where any "native" order that is a component part of an implied order – is cancelled or modified, all implied orders that use that order will be recalculated or cancelled. Where the change to the native order is via a cancellation message followed by a separate new order message – that could lead to an even larger number of updates.

On other trading venues, where a large number of implied routes are enabled, the market data is not published or visible for all implied routes to avoid the strain on the system for the exchange and market data consumers. In this scenario participants can locally calculate where implied pricing may improve pricing for a particular order. This is something the LME may consider in the future if more complex chaining was enabled.

5.4 Market data transparency

LME summary

- LMEselect represents the most transparent venue for pre- and post-trade transparency
- Practical transparency should be maximised such that all trades are made public as quickly as possible
- The LME therefore intends to require all risk transfer trades executed to be booked into LME systems and made public, in the exact instruments in which the trades were agreed
- Large trades may require deferred transparency to support liquidity providers

As outlined previously, the LME is of the view that LMEselect trades have the maximum practical transparency as they are distributed immediately on all the core market data feeds. However, in terms of the inter-office market there is more limited practical transparency on the market data feeds. This is driven by two key factors (1) no member to client inter-office futures trades are published on the core external feeds (2) some trades are not booked (as explained in section 5.2.1 above) due to the LME market structure.

5.4.1 All client trades published externally

The LME intends to solve for both issues by mandating that all member to client trades in the inter-office market are booked into the LME systems in the exact instrument "shapes" in which they are traded (see section 5.2.1), and then published on the core market data feeds.

Trades agreed in the inter-office market below the block trade threshold will need to have all component parts executed (or crossed) through LMEselect so do not require any additional transparency. Trades executed in the inter-office market above the block threshold will need to be booked into LMEsmart within 10 minutes such that they can be made public. This will be discussed further in the BWG.

It is important to note that for trades above the block threshold, the requirement will be that for all client trades there must be a published trade in the exact instrument "shapes" as they were traded. For example, if a client executes a 3-month trade and then later adjusts the position to a monthly date – both trades (the outright 3-month and the adjustment spread trade) will need to be booked by the executing member within 10 minutes to ensure that all market participants have visibility and to avoid information asymmetry (subject of course to any applicable post-trade transparency waivers).

The LME recognises the fact that many clients do not wish to see all the elements of such a trade in their account, but wish to see only the resulting monthly position. Some clients also need to be able to allocate their trades to sub-accounts, and thus may initially trade in a size above the block threshold, but then need to book the trades as sub-block pieces. The LME will ensure that the booking solution for these trades allows for these client needs. This topic will be a particular focus of the BWG. The LME also intends to ensure that there is no additional fee impact of these additional "shapes" which need to be booked in the inter-office market to ensure maximum transparency. It should also be noted that any subsequent allocation, give-up or client cross trades will not be required to be published externally on the core market data feeds as the initial trades have already been made transparent.

5.4.2 Large in scale deferral

Today the LME has Large-in-Scale ("LIS") transaction waivers for the options market whereby publication is delayed for large trades above certain thresholds. In making the changes to market data outlined above, the LME is aware it may be beneficial for the market to also introduce such thresholds for futures to support liquidity provision. The LME will engage further with the market to consider the appropriate calibration and structure (including optimal period of delay). Any such implementation is likely subject to consultation and any necessary regulatory approvals.

5.5 Supporting the physical market

LME summary view

- The LME remains committed to serving and supporting the physical market
- There are no changes proposed to the date structure or the daily cash price
- Daily dates (and broke dated spreads) are not subject to block trade thresholds

5.5.1 Daily dates excluded from block trade thresholds

As noted in section 5 above, block trade thresholds will not apply to daily prompts or spreads where one leg is a daily prompt. This reflects the lack of liquidity, low OI and large number of permutations that mean electronic liquidity in a CLOB is more challenging to meaningfully develop in these instruments.

Block trade thresholds will also not apply to cash outright trades, or spread trades from cash to other prompt dates in order to support the cash price.

5.6 OTC market considerations

LME summary

- The LME market structure should ensure the playing field is as level as possible between the OTC market and the on-exchange market
- Rules, fees and transparency requirements should not incentivise volume towards the OTC market to avoid oversight, as this fragments liquidity and could negatively impact the orderliness of trading
- OTC contracts, that reference LME prices and closely align to monthly exchange contracts (or spreads between) should broadly be subject to identical rules and transparency requirements
- The LME continues to consider whether publishing any aggregate OTC OI would be beneficial for the market

5.6.1 Block like rules for OTC look-a-likes

As explained previously, the LME believes the playing field should be as level as possible and there should be consistent transparency between the OTC and on-exchange markets; this is particularly important for very similar instruments. Therefore, for OTC trades (whether cash settled or physically delivered), that align very closely to the LME monthly futures (often referred to as "look-a-like" contracts) out to month 12 initially, the LME is minded to apply similar requirements to the exchange block rules.

The proposal is that if an OTC contract is using LME prices (or LME infrastructure) and the LME equivalent lot size is below the exchange block threshold, the member will be required to hedge on LMEselect (in the exact prompt executed with the client) or cross the trade through LMEselect at the clean price before confirming the client's OTC trade. Where the OTC contract is in an amount that does not align to the exchange lot size, the LME would expect members to round down to the nearest lot.

This is to ensure that very similar OTC look-a-like contracts are not used purely to avoid the exchange rules to avoid making them transparent. This approach will be subject to consultation.

5.6.2 Publishing aggregate OTC OI

The LME began receiving OTC position data for Nickel on 14 March 2022 (see LME Notice 22/064) and for all base metals on Monday 5 September 2022 (see Consultation Notice 22/145) and it stated it would not *"at this stage publish or otherwise create public transparency around the data that the LME proposes to require under the weekly nor ad hoc OTC position reporting arrangements described above. However, as set out further below, and as outlined in the Discussion Paper (January 2021) and Response Paper (March 2021), the LME continues to assess the potential benefits of wider transparency and how it may be implemented in future".*

The User Committee revisited this topic in early 2024, with some participants supportive of the LME exploring the publishing of some very high-level aggregated data, if possible, with the purpose of demonstrating the significance of the OTC market to the LME. The LME believes this could be beneficial and aligned to its requirements to maintain orderly markets. However, the LME is cognisant of the sensitivity and confidentiality of such data, and it would need to ensure that it is sufficiently aggregated and anonymised.

The LME also notes that there are a number of challenges with the existing data that it receives, as detailed in the Action Plan *"These include jurisdictional issues, such as with confidentiality and bank secrecy regimes, which limit the effectiveness of aggregating global OTC position data as not all client data can be provided."* The ability of the LME to resolve these challenges requires the support of global regulators including suitable mandates where appropriate.

The LME notes recent regulatory consultation in related areas, and will need to take account of any resulting requirements or rule changes when developing its approach in this area.

There are therefore several considerations for the exchange to take into account in the potential structure and terms by which any such data could be aggregated and anonymised and made public. This includes the level of aggregation and the time period after which the aggregated data could be published. This is an area the LME would welcome feedback from market participants.

5.6.3 Market data fees for OTC single dealer platforms

In seeking to ensure that the playing field between OTC and exchange trading remains level, the LME is also considering the appropriate charging model and fees for the use of its data in member-to-client platforms. Where such platforms offer direct display of raw LME data, they should already be paying real-time subscriber fees per end user.

However, the LME is also aware that some members offer OTC prices on their member-to-client platforms for contracts that reference LME prices, or are derived using LME prices or settle using the LME infrastructure. The LME is of the view that in principle the cost of accessing and distributing such OTC contract data should align to the costs of similar exchange data and is therefore considering the most appropriate way to charge for single dealer platforms that offer such OTC contracts.

5.7 Other considerations

5.7.1 Unexecuted order to trade ratio

As part of the move to enhance liquidity in LMEselect, the LME intends to re-assess its unexecuted order to trade ratio ("**UOTR**") policy. The current policy was introduced in 2017 to align with MiFID II requirements. However, in some areas such as the level of calculation (currently applied at member level not FIX session or client level) and the UOTR levels themselves, some further changes could be beneficial subject to any necessary regulatory approvals.

Longer term the LME will also consider whether more complex changes such as weighting different message types or basis position in the orderbook could be beneficial.

6 Sequencing and timeline

The LME has shared this White Paper to provide the market with additional detail on the measures to enhance liquidity. It is sharing its position ahead of further engagement – including working groups and consultations – in order to give the market as much time to consider and prepare for these changes as possible.

The LME intends to go-live with the initial set of measures outlined in this White Paper in H2 2025 (subject to consultation and any necessary regulatory approvals); further updates on the timeline will be provided in due course and the LME reserves the right to sequence the measures should it deem beneficial to do so.

7 Next steps

The purpose of this White Paper is to outline the LME's proposed approach and provide detail on the package of measures to enhance liquidity to give market participants additional detail to support preparing for these changes. While this is not a discussion paper nor consultation, the LME welcomes feedback in any area. Stakeholders can reach out to their existing contacts, or contact market.engagement@lme.com.

As previously mentioned, the LME will establish the BWG in order to discuss the implementation detail around blocks and for members to raise any questions or concerns with the solution design. Members interested in participating in the BWG are asked to contact the LME at market.engagement@lme.com.

It should again be noted that a number of initiatives may require rulebook consultations, and the LME will provide further details on any such rulebook consultation via market Notice. Some initiatives may be subject to regulatory approvals.