

Discussion Paper on Market Structure: Feedback and Outcomes

8 June 2021



SETTING THE GLOBAL STANDARD



What we set out to achieve

Discussion Paper launch statement from January 2021

“

The LME's mission is to be the trusted market of choice for the global metals industry and we have an important role to play in ensuring the market is fair, transparent and accessible for all who wish to participate.

We are committed to collaborating with our stakeholders as the LME evolves into a metals market for the future, and we encourage all market participants to feed back on these proposals and enable us to deliver the best possible solutions for the industry.

”



Commitment to strategic principles

Strategic principles first set out in the 2017 Strategic Pathway (SP17)

Serve the physical market

- Core mission of the LME is to provide pricing, risk management and terminal market services to the global physical metals industry
- Physical market linkage ensures LME prices appropriately reflect real world supply and demand, and maintains the broad ecosystem desired by all LME participants

Ensure fairness

- The LME's primary responsibility is to ensure fair and non-discriminatory access to its market
- The value of the LME market is maximised by allowing the broadest possible range of participants to hedge and invest, and ensure that all those participants have fair access to information

Increase user choice

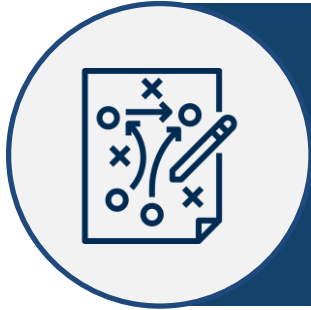
- The LME's market structure should be suitable to meet the varied needs and preferences of its users rather than provide a model that forces all participants to trade in the same way

Maximise trading efficiency

- It is in the mutual interests of participants, the LME and the broader market that customers be able to trade as extensively as they wish, unencumbered (as far as possible) by the frictional costs of trading



Feedback, outcomes and looking ahead



Summary analysis of feedback received

- 192 written responses
- Wide breadth of views expressed



Decisions and outcomes

- The Ring and reference pricing
- Enhancing liquidity
- Realised variation margin
- Market conduct considerations



Looking ahead

- How market structure changes fit with the LME's development path



Feedback summary

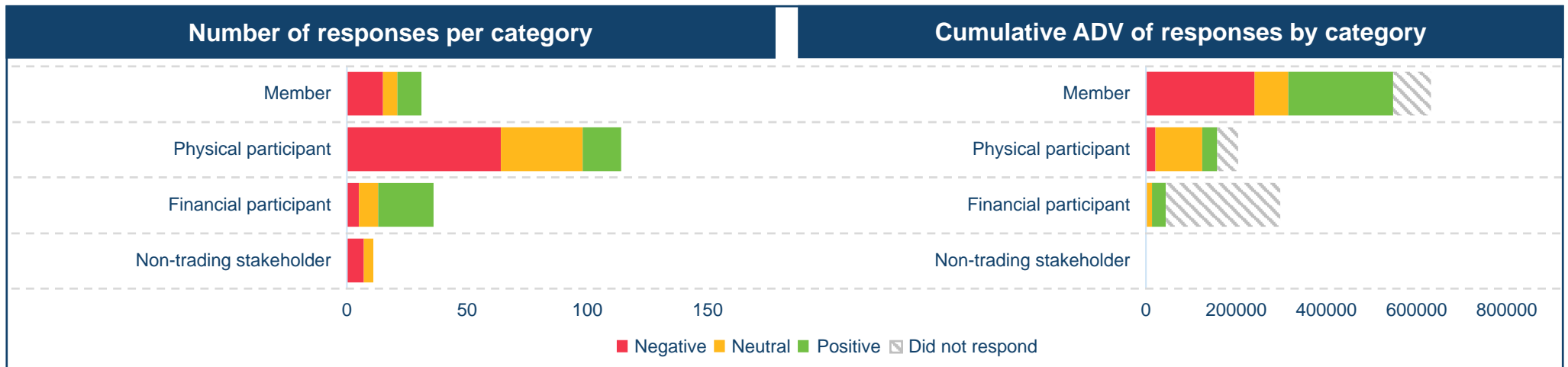
1 Response summary: the Ring and reference prices

Original LME Discussion Paper proposals

- Electronic pricing has served the market well since the Ring was temporarily closed in March 2020 due to COVID-19 – including Official Prices for the physical market
- It is time to consider moving to an electronic pricing structure and closing the Ring, giving all participants certainty over the future of pricing and allowing all stakeholders to make business decisions with confidence

Key themes

- **Traditional users trust the Ring and see significant value in the member-client relationship**
- **Guaranteed orders are seen as important to the LME market. In particular physical clients being able to get guaranteed orders against the Official Cash Settlement**
- **Most other participants agree that electronic pricing increases transparency and broadens participation**
- **Electronic pricing has worked for outright, but the curve is more challenging to price**
- **Timing of any changes is important**



1. Only Exchange Contracts are considered for the member ADV. Client Contracts count towards the clients' ADV. Each side of each contract counted once.



2 Response summary: enhancing liquidity

Original LME Discussion Paper proposals

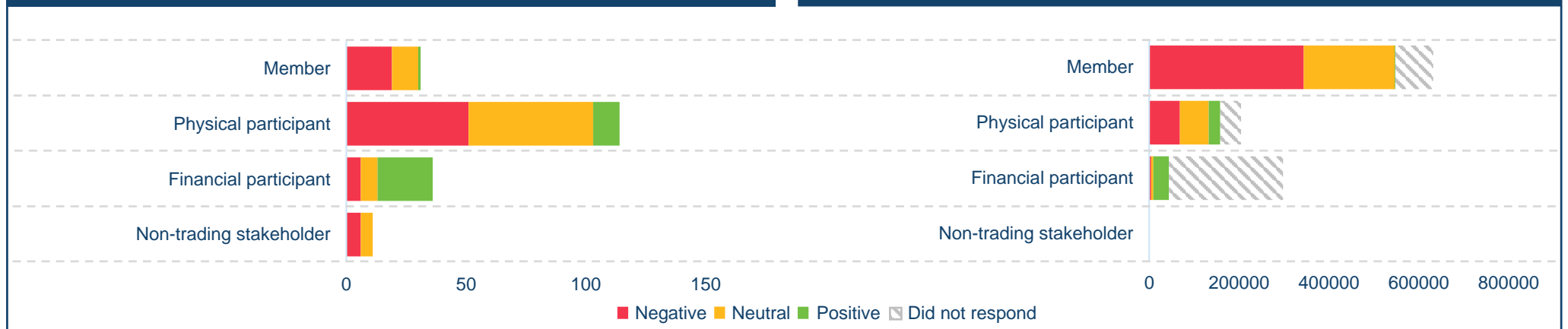
- No plans to change LME client servicing models or the date structure, which are fundamental to the physical market
- Proposing to incentivise trading in the central electronic venue – by rebalancing electronic and inter-office fees – which will help increase liquidity for all participants while ensuring transparency and trading efficiency
- Introducing a new Enhanced Transparency Cross trade to allow members to bring the benefits of inter-office pricing to the electronic market

Key themes

- **Most respondents are supportive of increased electronic liquidity in some instruments, but highlight that it may not be straightforward to achieve**
- **While not directly opposed to the proposals, many traditional participants are less supportive of electronic markets more broadly**
- **Participants are understandably less supportive of fee increases but they generally support the principle of promoting electronic liquidity**

Number of responses per category

Cumulative ADV of responses by category



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3 Response summary: realised variation margin

Original LME Discussion Paper proposals

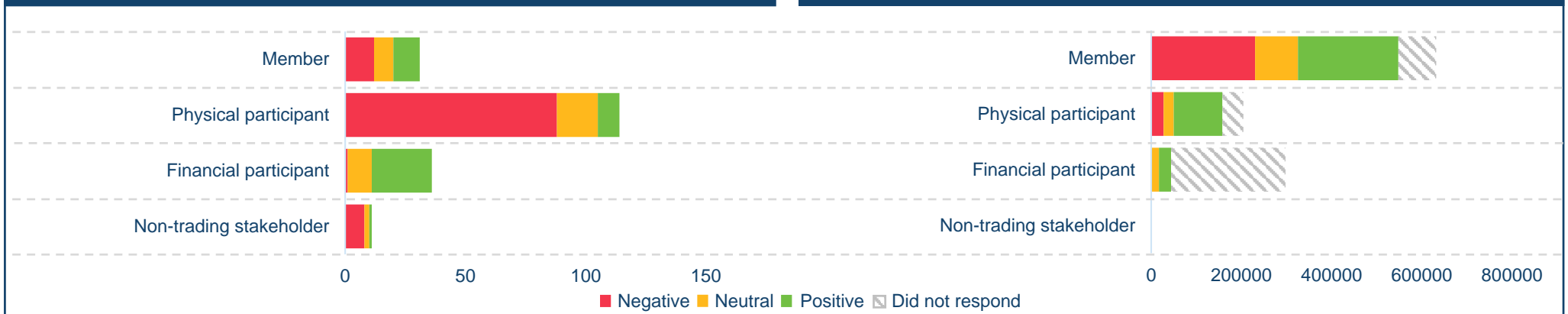
- Consideration of a move to a Realised Variation Margin (RVM) model given its benefits: greater trading efficiency, standardisation, potential regulatory cost savings, and the removal of a barrier to market entry
- The benefits have to be balanced against the potential consequences, particularly regarding the risk of impacting the provision of credit by some clearing members

Key themes

- **Broad support for the standardisation of RVM by financial community (member and client) and larger physical traders**
- **Smaller physical players view RVM as risking their credit line provision by members. The provision of credit is very important to smaller physical clients and they view it as a USP of LME markets**
- **Daily settlement is operationally challenging for smaller physical participants**
- **Many financial respondents acknowledge the importance of credit lines to physical participants and do not want those participants to be excluded from the market**

Number of responses per category

Cumulative ADV of responses by category



1. Only Exchange Contracts are considered for the member ADV. Client Contracts count towards the clients' ADV. Each side of each contract counted once.



4 Response summary: market conduct considerations

Original LME Discussion Paper proposals

- Further measures could be introduced to increase transparency on stocks and physical movements
- Additional policies and procedures could be introduced to further reduce the risk of market squeezes

Key themes

- **Broad support for more transparency in stock reporting**
- **Physical transaction reporting seen as overreach**
- **Existing lending rules regarded as adequate by many**
- **LME could explore other measures to protect against squeezes**
- **OTC reporting seen as operationally challenging and potential overreach**

Note: The LME has not provided quantitative analysis for the market conduct section. This is because the proposals in the Discussion Paper were at a much more formative stage much feedback was seeking clarity on the detail of implementation before expressing a view for or against the proposals.



Outcomes

Outcomes summary

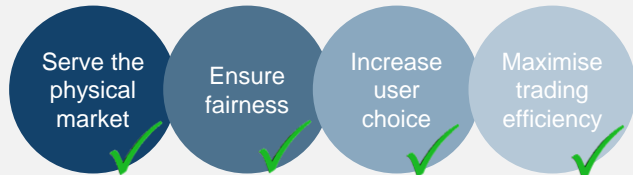
Discussion Paper topic	Summary of outcomes
1 The Ring and reference prices	<ul style="list-style-type: none">• Closing Prices permanently electronic¹ and methodology to be evolved• Ring reopens for trading and Official Prices²• Roll out the remaining 3M Closing Price TAS contracts• Closure of back-up Ring site
2 Enhancing liquidity	<ul style="list-style-type: none">• Start to introduce measures from 2022• Focus on enhancing electronic liquidity in certain liquid instruments only• Ensure “back-to-back” or “inter-dealer” brokerage business models remain well supported• Increase practical transparency of inter-office market
3 Realised variation margin	<ul style="list-style-type: none">• No immediate changes to margin methodology• Deliver VaR before other changes to margin methodology• Explore flexible approach allowing benefits of CVM for some clients, while delivering RVM for the market
4 Market conduct considerations	<ul style="list-style-type: none">• Developments to off-warrant stock reporting to further improve transparency• Investigate limited OTC trade reporting

1. The LME has decided to determine the Closing Prices electronically on a permanent basis. The LME will now consult on changes to the LME Rules to give effect to this decision.
 2. The LME believes that Official Prices generated with the electronic methodology would have the same benefits as electronically determined Closing Prices. However, having listened carefully to the feedback received in response to the Discussion Paper, the LME will now consult on its alternative proposal to keep Official Prices determined in the Ring in circumstances where Closing Prices are determined electronically going forward. The LME will also consult on the introduction of a mechanism whereby, if objective criteria related to the level of support of Category 1 Members for the Ring-based price determination process are triggered, the LME would be empowered to decide, without further consultation, whether to move Official Prices to electronic determination in the future in order to ensure that the Official Prices determination process remains capable of producing a reliable, representative reference price.
- 11



1 Outcomes: the Ring and reference pricing

Alignment with strategic principles



Outcome

Closing Prices to be established electronically

- Lay out pathway for evolution of Closing Price calculation methodology¹
- Set up Closing Price Working Group comprising market participants to optimise Closing Price methodology

Proposal to return Official Price determination to the Ring

- Further consultation on pricing venue changes issued on 8 June
- Introduction of appropriate triggers to move Official Prices electronic if reliability of prices or support from Category 1 members changes

Ring to re-open for trading on 6 September

- Closure of back-up Ring site

Enable 3M Closing Price TAS contracts on additional metals for market users to utilise should they wish

- LME ready to launch TAS contracts for additional prompts based on market demand

Rationale

- Enhances participation and transparency; suits key users of these prices – eg. financial and larger physical customers
- LME views current electronic methodology as more representative than the Ring, but will be enhanced, taking into account input from users
- Smaller physical users prefer Ring pricing, and focus on Official Prices
- Ring infrastructure to remain, continuing to support Ring member teams for Ring and electronic trading
- Date provides certainty to the market – first vaccinations offered to all adults and adequate time passed to ensure vaccine efficacy
- Business continuity process allows all other data sources to be used in event that primary venue unavailable
- Supports the permanent move to electronic pricing for Closing Prices, providing users with the choice to trade at settlement

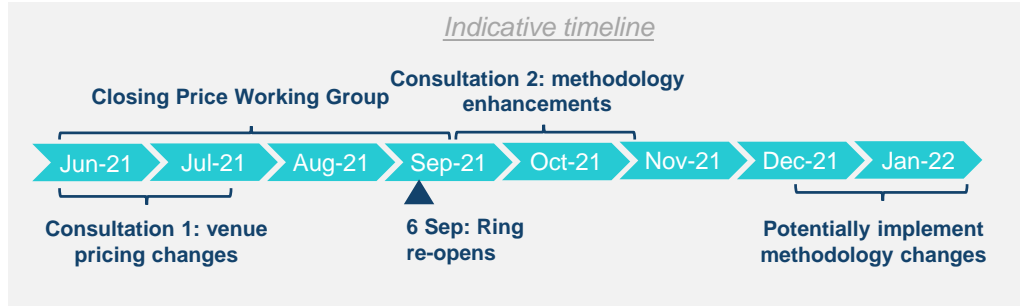
1. A further consultation will be issued on the enhanced methodology – details on timing on slide 13.



1 Closing Price methodology evolution

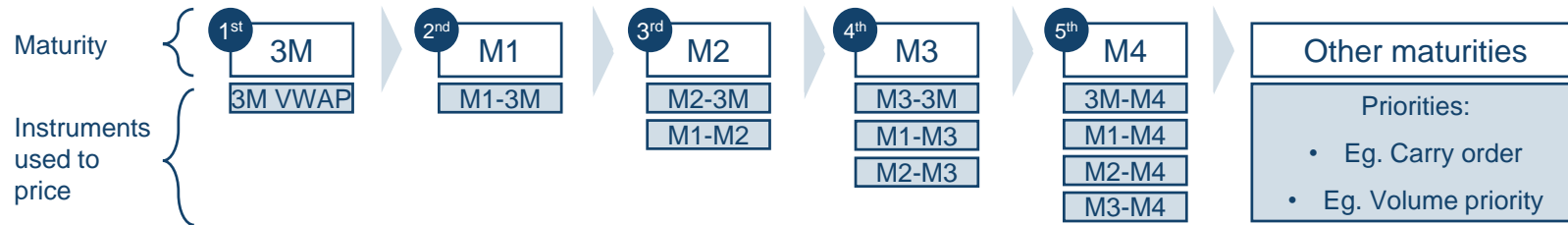
Next steps for the Closing Price process

- The current electronic Closing Price methodology has increased participation and transparency
- To enhance the process further, the LME will look to implement a more deterministic electronic pricing methodology with input from the Closing Price Working Group; Pricing Blueprint document provides further details
- New methodology will be consulted on and any changes implemented from 2022



The Closing Price methodology evolution – subject to further consultation in Q3 2021

- The most liquid contracts at the front of the curve would be established based on a volume weighting of traded prices during the pricing period to best reflect fair value
- Less liquid instruments will still require expert judgement, but with clear priorities to be established in order to resolve pricing conflicts
- The LME has outlined a number of possible priority approaches, and will work with the Closing Price Working Group to determine the optimal approach



Front of the curve (more liquid instruments)

- Defined order of instrument valuation with the 3M VWAP established first as the anchor point
- VWAPs of spreads would then be calculated to value the liquid monthly prompt dates
- For example, if M1 is valued first it would use the VWAP of the M1-3M carry applied to the established 3M price. If M2 is valued next, it would use a VWAP of M2-3M applied to the 3M price and a VWAP of M1-M2 applied to the already established M1 price; this would continue until M4 is valued
- The daily dates would be established using the rest-of-curve methodology

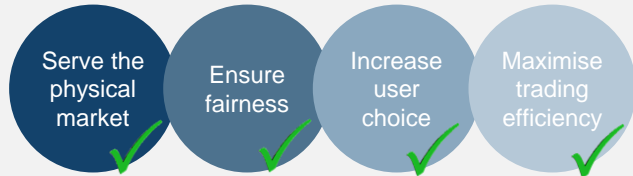
Rest of the curve (less liquid instruments)

- Potential priority approaches include:
 - Carry order** – identifying an order of priority for carries. Potentially with a set of “prime” carries which would always take priority
 - Volume priority** – carry with the highest trading volume would take priority
 - Other** – there are a number of other approaches (or combination of approaches) which could be used
- Each approach has varying impacts, which the LME has outlined in its Pricing Blueprint document, and will be discussed with the Closing Price Working Group



2 Outcomes: enhancing liquidity

Alignment with strategic principles



Outcome

Active changes to begin in 2022

- Full pathway of changes published in late 2021 followed by consultations where appropriate
- To consider a whole-market approach to ensure optimal liquidity for all

Introduce combination of measures to set of liquid contracts only

- Some combination of (1) fee changes (2) light block rules (3) liquidity provider programme (4) promotion of enhanced transparency cross trade

Enhance transparency in the inter-office market

- Increase practical transparency by ensuring all price forming trades are booked and published more quickly on core market data feeds

Ensure riskless brokerage business model remains well supported

- Potentially use existing RIB framework to align fee impact for “back-to-back” or “inter-dealer” brokerage models

Rationale

- Allows any initial pricing changes to take effect before introducing fee-related measures to enhance electronic liquidity
- Ensures changes take effect in the most appropriate member/client/OTC contexts

- Helps to drive electronic liquidity and maximise trading efficiency
- Ensures fairness by recognising the inter-office market’s role in supporting more complex and less liquid instruments

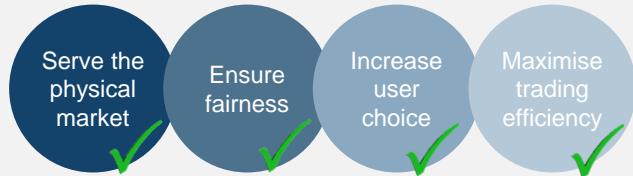
- Increases transparency of the inter-office market while respecting the required flexibility of physical client servicing models

- Ensures that any fee changes do not unduly impact fee-sensitive brokerage business models, which support broad participation and are liquidity additive



3 Outcomes: realised variation margin

Alignment with strategic principles



Outcome

Investigate feasibility of a flexible approach to variation margining

- Provides benefits of CVM for some clients, while delivering RVM for the market

Prove concept in existing ferrous markets, which are margined on a realised variation basis

No immediate changes

- Prioritise the introduction of value-at-risk (VaR) initial margin methodology from 2024, with RVM to follow if adopted

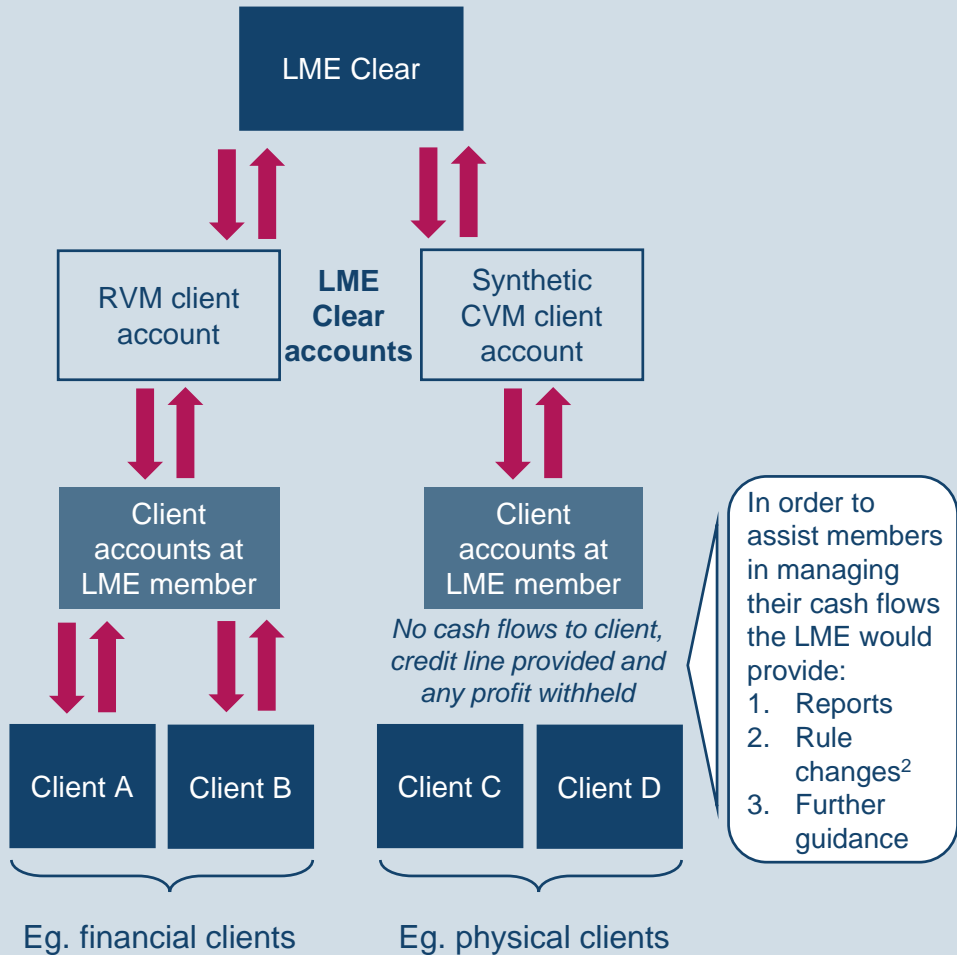
Rationale

- Potential new approach intended to support the provision of credit to smaller physical users
- Allows those larger physical clients, financial clients and Category 2 members to benefit from their preferred market-standard RVM model
- Ensures maximum testing and preparation for new approach before applying across all metals
- Enables all users to benefit from optimised initial margin requirements before any potential move to RVM

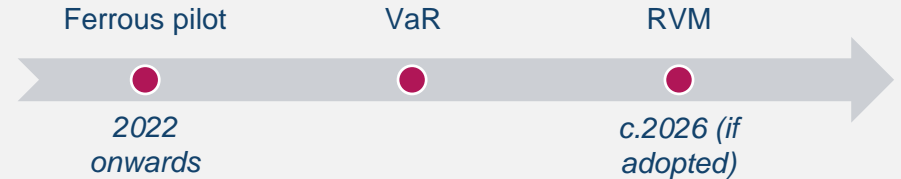


3 Potential model for flexible RVM/CVM structure

Illustrative flexible approach towards variation margining¹



Indicative timeline



Explanation

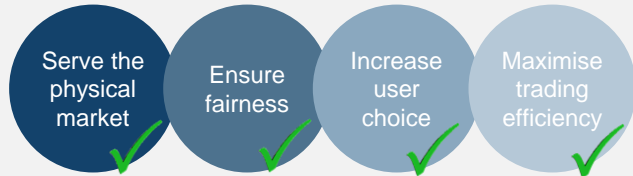
- Clients A and B are in a regular RVM account, they settle profit and losses on a daily basis
- Clients C and D opted in to a synthetic CVM structure where their trades settle profit and loss daily but they would not receive any payment of profits until maturity (and have accepted the increased credit risk on their member)
- The member may be able to use realised profit from client C's position (which would be withheld from client C), to subsidise the margin requirements for client D
- A flexible model could therefore support the continued provision of credit to smaller physical participants
- The LME would provide reports, rule changes² and guidance to support members in offering a synthetic CVM solution
- The LME will also explore other technical clearing solutions that could support the continued provision of credit to clients

1. At this stage the approach is indicative only and provided on a non-reliance basis. Further internal analysis and discussion with participants will be required before any formal proposals can be made.
 2. Should any rule changes be deemed necessary in the LME's view in order to achieve a solution.



4 Outcomes: market conduct considerations

Alignment with strategic principles



Outcome

Developments to off-warrant stock reporting

- All off-warrant metal (within specified locations) must be reported in order to be warranted at a future date, with near real-time reporting
- Reporting requirements moved to metal owners, supported by members

Investigate approach for OTC trade reporting

- Look to apply to OTC contracts most similar to LME contracts
- Explore using existing trade registration functionality (LMEsmart)

No direct physical transaction reporting requirements

- Focus on monitoring physical transaction impact on the LME (and on ensuring the exchange uses its recently strengthened investigatory powers to undertake any required retrospective action)

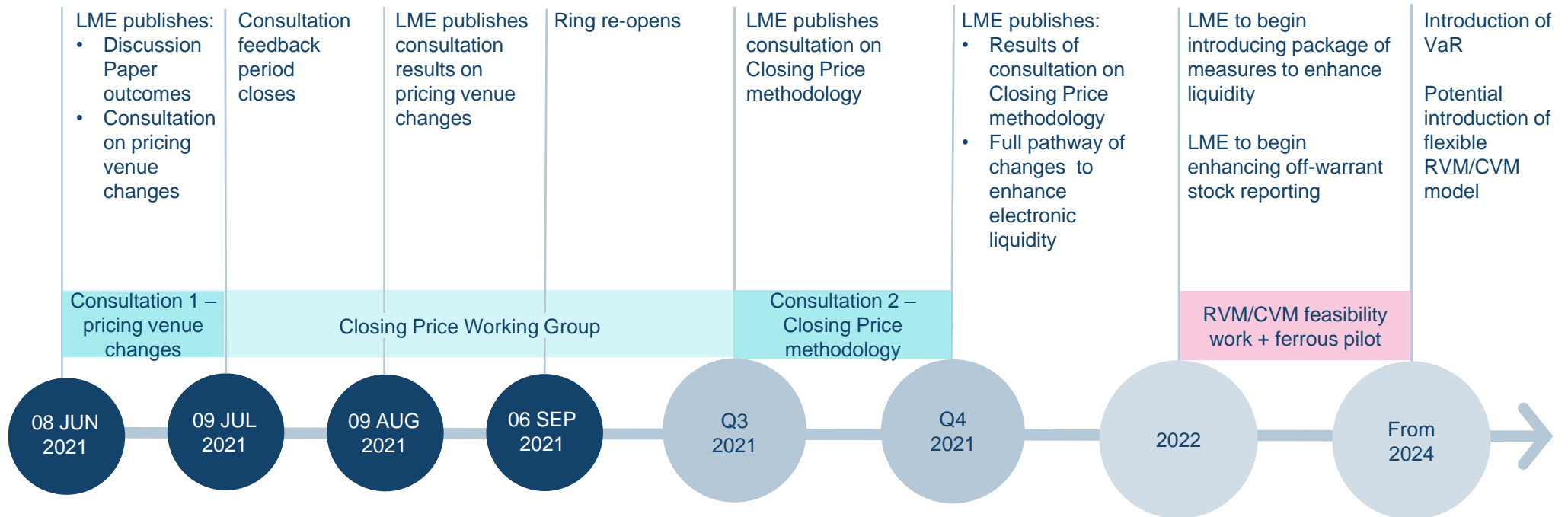
Continue with current approach to preventing market squeezes via LME lending rules

Rationale

- Increases transparency and makes the data more useful to market participants
- Ensures OTC markets are not used as a way to avoid LME rules and fees
- Monitors trades which are most likely to be impactful to LME markets, and ensures minimal operational burden
- Confirms the LME's commitment to ensuring fair and orderly markets while respecting boundaries of pure physical market
- Maintains highly regarded lending rules, while not risking unintended consequences of increased position limits



Implementation timeline



Note: Timings are indicative and subject to any necessary consultations and/or regulatory approvals.



Looking ahead

Delivering on our vision and strategic principles

Vision & strategic principles

The LME's vision is to be the trusted market of choice for the global metals industry

Serve the physical market

Ensure fairness

Increase user choice

Maximise trading efficiency

Market structure evolution

Evolve pricing methodology – ensure LME reference prices remain as reliable, representative and robust as possible for diverse stakeholders

Enhance liquidity – adopt an optimised set of solutions to build electronic liquidity while supporting existing business models

Develop margin methodology – investigate flexible margin approach to deliver optimal solution for all participants

Core technology refresh

Market data – LMEsource multicast data platform successfully introduced, and planned integration of both electronic and non-electronic market data in a single platform

LMEselect v10 – a new architecture, leveraging HKEX technology, which offers higher performance, more stable latency characteristics, and a robust foundation for development of future functionality

Digital innovation

Electronic warranting – successfully introduced an electronic warranting process, streamlining the warrant lodgement and withdrawal process by adopting a new dematerialised structure

LMEpassport – a digital register that records electronic Certificates of Analysis (“CoAs”) and ESG information

Spot trading platform – offer access to low carbon aluminium and other products to market users on a voluntary basis

Sustainability

Responsible sourcing – new rules to ensure that LME listed metal meets globally accepted ethical standards in respect of human rights and corruption

Transparency and access – provide transparency of sustainability credentials (via LMEpassport) and access to sustainably produced metal (via spot trading platform)

New risk management products – support the recycling and battery material sectors

Conduct & transparency

Enhancement of investigatory powers – greater ability to take any required retrospective action in respect of market abuse, following Rulebook consultation in 2020

Increase physical market transparency – introduce near real-time off-warrant stock reporting

OTC trade reporting – investigate simple OTC trade reporting for LME look-a-like contracts



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