LONDON METAL EXCHANGE

To: All members and other interested parties

Ref: 15/023 : A023

Date: 14 January 2015

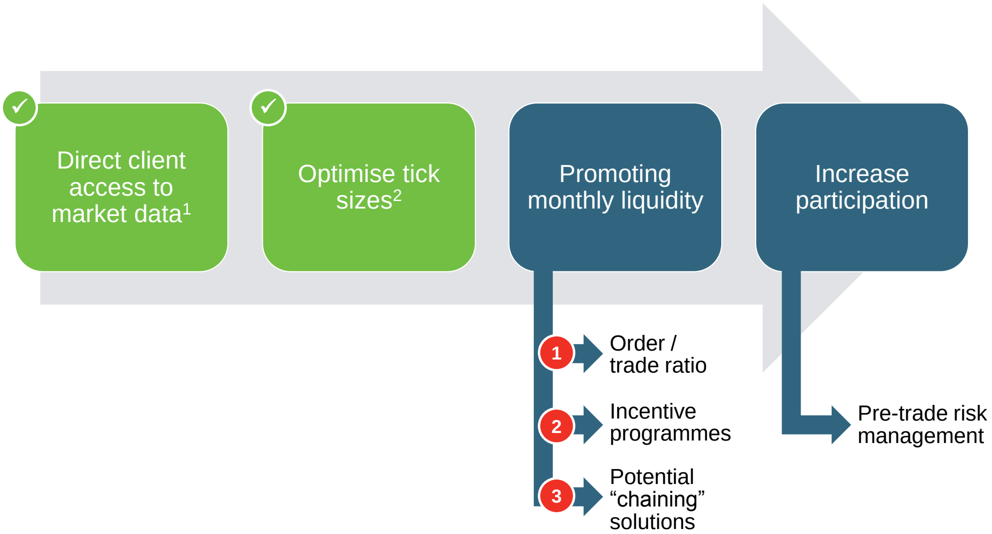
Subject: **ROADMAP TO ENHANCED PARTICIPATION AND LIQUIDITY ON THE LME**

Summary

1. This Notice provides an update for the market on the LME's current intentions to maximise participation on the LME market – in particular, promoting monthly liquidity.

2. The LME today is commencing a formal consultation on an amendment to the order to trade ratio, as set out in Notice 15/022 : A022 (Consultation on Amendment to LMEselect Order to Trade Ratio Policy). This current Notice (15/023 : A023) contains further information in respect of the proposed amendment. This current Notice also contains information about other possible future rule changes upon which the LME welcomes general feedback from, and discussion with, the market; however, the LME is not here formally consulting on those possible future changes. In addition, the LME welcomes any questions about any of the matters discussed in this current Notice. The LME reserves the right, if necessary, to consult in the usual way on possible future rule changes in the future.

3. The diagram below sets out how the LME is presently proposing to proceed with enhancing participation on its market. Certain key steps have already been announced to the market, such as direct client access to market data and the optimisation of tick sizes. In addition, key future enhancements to LMEselect, such as pre-trade risk management, will further enhance market participation.



1. Change effective from 24 March 2014. For further details please consult Notice 14/052 : A050.
2. Change will become effective 19 January 2015. For further details please consult Notice 14/358 : A349

4. The focus of this Notice is to detail the third step in the diagram, namely the promotion of monthly liquidity on the LME's market – and in particular, how the LME considers that changes to the order to trade ratio, the introduction of incentive programmes, and the potential to introduce "chaining" solutions on LMEselect will further enhance liquidity and participation on the LME – while maintaining the flexibility of the LME's daily date structure, which remains fundamental to its market offering.

Background

5. The LME is the world's centre for industrial base metals trading, and it is a core aim of the LME to ensure that participation in the LME is maximised. The LME believes that certain prospective participants are precluded from participation by structural barriers, and that these barriers can be mitigated without adverse impact on current market participants.

6. It is acknowledged that the market is strengthened by the involvement of multiple categories of metal participants. The LME's Commitments of Traders report provides data relating to the diverse participation base. However, the LME is of the view that physical and financial order flow and open interest are mutually supportive: the involvement of the physical industry provides macro-economic price relevance to the LME's prices, and the involvement of investors enhances liquidity across the market.

7. The LME is differentiated amongst global exchanges by the flexibility of its prompt date structure. The LME's prompt dates (i.e. the date on which a forwards contract will be settled) are daily out to three months, weekly out to six months, and monthly beyond six months. This is in contrast to the majority of global commodities exchanges, which offer settlement on only one day each month.

8. The LME recognises the strong benefits provided by its daily prompt date structure. In particular, the calculation of daily settlement prices provides pricing data for use in the settlement of physical supply agreements (including those calculated on the basis of average daily pricing), and the ability to trade Cash and Tom/Next contracts.

9. The most frequently cited concern from certain users of the LME is that a rolling 3 month contract is not suitable to hold for more than one day. This is because, on the next day, the prompt date is no longer liquid. For example, consider a market participant looking to achieve exposure to metals prices for one month, who wishes to achieve this by trading on the LMEselect electronic platform[1]:

[1] At present, only LME category 1 and 2 members can directly access LMEselect. However, many clients enjoy sponsored access to LMEselect through LME members. Other clients request that members execute trades on their behalf, but on the basis of liquidity which the client can see on the LMEselect orderbook. In general, many clients prefer to execute against displayed electronic orderbook liquidity, given the pre-trade transparency for available pricing and bid/offer spreads.

- Buys a liquid 3-month contract on 2 January. This 3-month contract is for delivery on 2 April[2]

- Holds the position for one month, until 2 February, at which point the participant wishes to close the position

- However, on 2 February, the liquid 3-month contract is for delivery on 2 May. The 2 April prompt date is no longer liquid, and the market participant looking to close exposure for the 2 April prompt date cannot find a liquid central market in which to trade out of the contract. Accordingly, the market participant must wait either for the date to become liquid again (which will not happen until 2 April is the cash trading date, i.e. on 31 March), or will need to seek a price away from the LMEselect orderbook (for example, by requesting liquidity bilaterally from a member).

10. Accordingly, for such users, the normal practice is to adjust positions to a more standardised date, where liquidity can be better guaranteed in the event that the market user wishes to exit the contract. Market convention on the LME is that the standard monthly prompt date is the third Wednesday of the month in question ("monthly prompt dates", "monthly dates" or "third Wednesdays"). At present, 65%[3] of market open interest sits on monthly dates – which, in the view of the LME, demonstrates significant market demand for monthly liquidity exposure.

11. A key benefit of the LME's daily date structure is that monthly dates are by definition available as part of the daily, weekly and monthly prompt date structure. As such, the LME does not believe that there is any inherent conflict between users of daily and monthly prompt dates on its market.

12. However, even though these monthly dates represent a standardised date within the LME structure, the concern most often raised by actual and prospective users of the LME is in respect of liquidity on such prompt dates. In general, the third Wednesday dates are not liquid on LMEselect, and hence users looking to execute third Wednesday contracts will instead achieve such exposure bilaterally with a broker. The broker will provide exposure to their client either through an LME contract or an OTC relationship. The member will then manage this exposure using one of two approaches, or a combination thereof:

    - By internalising the risk, i.e. looking to transact an offsetting client trade, but without laying-off risk on the LME; and/or

    - By trading a liquid outright three month, and a carry trade on the LME market

---

[2] This example assumes all dates cited are valid LME prompt dates, i.e. ignoring the potential effect of weekends or public holidays.

[3] Average for the first 9 months of 2014.

The LME is aware that several members offer screens to their clients displaying bids and offers for monthly LME prompt dates.

13. For the avoidance of doubt, the LME does not have any concerns as to the ability for market users to find exposure on any prompt date – it is in the nature of a daily market, which has hundreds of valid prompt dates, that most of those prompt dates will not have displayed liquidity on LMEselect. The LME does not expect that members and other market participants would wish to populate bids and offers on all those dates, given the relative rarity of execution on those dates. In this respect, the LME's member-to-client and telephone member-to-member market provide exposure on illiquid prompt dates if required. Market users will experience wider bid/offer spreads on such illiquid dates than on more liquid dates, but this is the usual situation on all markets.

14. Given the particular importance of monthly prompt dates to the market, it is proposed that LMEselect should feature bids and offers on third Wednesdays, such that market users will be able to see the pricing levels, and bid/offer spreads on these prompt dates. This will be of material assistance to market users in viewing the available liquidity on monthly prompt dates.

15. Furthermore, the LME strongly values the activities of its members and the consequential monthly liquidity on the LME market. The LME expects to work closely with its members in delivering monthly liquidity solutions. In particular, the LME hopes that its members will contribute monthly liquidity directly onto LMEselect. In formulating this proposal, the LME notes the supportive comments of the LME's Trading Committee (which communicates, via a broad cross-section of representatives, the interests of LME category 1 and category 2 members).

16. In particular, the LME emphasises that the execution of contracts for monthly prompt dates will still fully involve members in an execution and clearing capacity. Furthermore, it should be noted that market users often require execution on monthly prompt dates in significant volume. Regardless of whether liquidity is displayed on LMEselect, the execution of significant volumes will likely still be achieved via bilateral quotes from members to their clients.

17. The LME also notes the suggestion from its options community to enhance third Wednesday liquidity. LME options exercise into monthly contracts, and the provision of a more liquid monthly market is therefore expected to facilitate more effective delta-hedging by parties writing LME options, and consequently a more liquid options market.

Promoting monthly liquidity

18. The LME is proposing the following steps to enhance the availability of monthly liquidity to current and prospective market users (and it is today launching a formal consultation on the first step):

Step 1: amending the order to trade ratio to exclude third Wednesday contracts – facilitating market-making on outright monthly prompt dates

19. Following discussions with members and specialist market-makers, the LME acknowledges that a significant number of traders would be interested in placing bids and offers on monthly dates.

20. In the first instance, market-making players employing this strategy would observe the liquid 3-month price, and take a view on the date spread between the 3-month date and the monthly dates for which they wished to make markets. The market-maker would then combine the observed 3-month price with their view on date spread, apply a bid/offer spread and then post bids and offers on the monthly prompt date in LMEselect.

21. To the extent that the market-maker's bid was hit, or offer lifted, by a counterparty, the most likely approach would be for the market-maker to then immediately offset the outright risk by trading the related long or short contract in the liquid 3-month market.

22. As the 3-month market moves, market-makers would likely look to adjust their monthly bid/offers accordingly. However, due to the possibility of simultaneous execution, it should be noted that the market-maker cannot guarantee that the best 3-month bid or offer in the orderbook will be available at the point the offsetting trade is required (this danger of trading one leg but missing the other is known colloquially in the market as "legging"). Accordingly, it is likely that bid/offer spreads on posted monthly liquidity will (at least initially) be wider than those observed on the 3-month market. However, the LME expects that, even in this case, market users will view displayed monthly liquidity as a positive for market transparency and execution certainty.

23. At present, the application of such a strategy is effectively precluded by the LME's order to trade ratio[4]. As set out more fully in Notice 14/105 : A102, the LME operates an order to trade ratio of 50:1, meaning that one lot must be executed for every 50 order-entry actions by an LMEselect participant. This ratio restricts market makers in illiquid markets when initial trade volumes could be low and therefore users would be charged for breaching the ratio.

24. Accordingly, the LME is proposing that outright third Wednesday order actions be excluded from the LMEselect order to trade ratio calculation of members' and members' clients' order flow for the first 6 tradable months for aluminium, copper and zinc (see Notice 15/022 : A022 Consultation on Amendment to LMEselect Order to Trade Ratio Policy for information on the consultation on that proposed amendment). The LME would, however, continue to monitor the order to trade ratio and reserves the right to re-impose limits if necessary to protect the efficiency of its and members' systems or the orderly function of the market or for any other reason.

[4] The LMEselect Order to Trade Ratio Policy was originally implemented as a control mechanism for the LME to protect LMEselect from high volumes of orders. The most recent system upgrades, extensive testing and continued safe operation have provided assurance of the stability of the system.

25. The benefit of this step would be to enable market-makers to post liquidity on monthly prompt dates, providing better displayed liquidity as set out above. Potential costs (in addition to those laid out in the "Cost / benefit analysis" section below) may be a greater processing burden on LME systems (although the LME has assessed the expected load arising from this initiative and is confident that capacity remains sufficient) and the potential for lower-quality orders to be placed on the order book (although the LME believes this to be unlikely, given the lack of current liquidity in which such lower-quality orders would sit).

26. For the avoidance of doubt, the LME does not anticipate that market-making will be performed by so-called "high frequency" trading participants, and the market-making approaches required to post liquidity on third Wednesday dates do not inherently employ high-frequency trading techniques.

27. The LME has today launched a consultation on Step 1 and welcomes responses from the market regarding its proposal to implement this amendment.

Step 2: incentive programmes – promoting market-making on outright monthly prompt dates

28. As set out above, the LME believes that a number of participants would be willing to place bids and offers on monthly prompt dates following a relaxation of the order to trade ratio per Step 1 (above). However, in order to make good on its commitment to deliver enhanced monthly liquidity, the LME would further consider incentivising participation via market-making programmes.

29. The market-making programmes may include fee rebates for proprietary trading firms executing on LMEselect via LME category 1 or category 2 members, or proprietary trading accounts within LME member firms.

30. The LME proposes to discuss the precise nature of such programmes with all potentially interested participants. Any participants wishing to be involved in such conversations are invited to contact the LME.

31. The benefit of this step would be to further incentivise market-makers to post liquidity on monthly prompt dates, providing better displayed liquidity as set out above. Potential costs (in addition to those laid out in the "Cost / benefit analysis" section below) may be that the provision of incentives alters the behaviour of market participants in a manner which would otherwise not be observed in the absence of such incentive programmes.

32. The LME continues to develop its thinking relating to Step 2 at this time. Furthermore, as a commercial matter relating to the LME's charging model and not to a proposed rule change, the introduction of incentives would not be expected to be subject to consultation. However, as part of its ongoing discussion with the market, the LME welcomes comments from the market regarding the possible change.

Step 3: potential "chaining" solutions – delivering implied liquidity in LMEselect

33. Based on market discussions, the market believes that a large number of players will look to post liquidity per steps 1 and 2. However, such an approach does require the construction of an algorithmic engine to observe the 3-month price, and adjust monthly

bids and offers accordingly. Additionally, the danger of "legging" may discourage some participants from offering such quotes.

34. A more direct approach is to enable implied liquidity (also known as "chaining") in LMEselect. Under this system, LMEselect will automatically join together (or "chain") outright orders and carries, in order to create a broader set of outright bids and offers. For example, if on 1 September 2014:

- Aluminium 3-month outrights (i.e. for delivery on 1 December 2014) were bid at \$2,000 and offered at \$2,001.

- Aluminium 3-month to Dec-14 (i.e. for delivery on 17 December 2014) carries were offered at \$100 contango and bid at \$101 contango.

- Then an implied liquidity solution would display liquidity on the Dec-14 prompt date at \$2,100 (bid) and \$2,102 (offer).

- If a trader were to lift the Dec-14 offer, LMEselect would automatically execute the 3-month outright offered and the 3-month to Dec-14 carry bid. The system would guarantee parallel execution, i.e. there would be no danger of "legging" in this scenario.

35. At present, carries between 3-month and monthly dates are not liquid in LMEselect, and so simply enabling implied liquidity would not, in and of itself, create liquidity on monthly prompt dates. However, the LME believes that, in an implied liquidity environment, market participants would be willing to post bids and offers on such carries, knowing that these are more likely to be executed as part of a chained bid.

36. However, the technology investment required to deliver implied liquidity is significant, particularly given the increased message count which would result from the chained orders. Accordingly, implied liquidity will be considered for delivery in a future release of LMEselect. As such, the LME believes that encouraging market-making on outright monthly prompt dates as described in step 1 and 2 represents the most effective path towards enhanced monthly liquidity on the market. For the avoidance of doubt, there can be no assurance that implied liquidity will be implemented in LME systems.

37. The benefit of this step would be to further incentivise market-makers to post liquidity on monthly prompt dates, providing better displayed liquidity as set out above. Potential costs (in addition to those laid out in the "Cost / benefit analysis" section below) may be the additional burden on LME systems, which is why step 3 would not be proposed until such time as the LME had made the appropriate changes to its systems.

38. The LME is therefore not proposing to implement Step 3 at this time and it is not here formally consulting on the possible change; however, as part of its ongoing discussions with the market, it welcomes comments from the market regarding the possible future change.

The LME's ongoing commitment to its core date system

39. As set out above, the LME notes that its date structure represents a core element of its market offering. Accordingly, the LME has given appropriate consideration to the potential unintended consequences of this proposal.

40. The major concern historically expressed by the market is that a successful incentivisation of monthly liquidity may reduce trading activity on the core three-month contract. This could have particular consequences for LME Ring trading, given the potential for date structure-related business which is traditionally undertaken on the Ring to be diminished. However, the LME views this as self-correcting, since the provision of electronic liquidity between the three-month and monthly dates (either through automated market-making or implied liquidity solutions) operates in both directions, and so the provision of "native" monthly liquidity would add further depth to the three-month prompt as well.

41. The LME notes concerns that a reduction of execution on the rolling three-month date would lead to less liquidity at the front end of the curve, as residual open interest would not be observed. However, the LME believes that the value of its date structure and in particular, Cash outright and Tom/Next carry trading, provides natural front-end liquidity regardless of pre-existing open interest.

42. The LME again takes this opportunity to restate its commitment to the date system which, combined with the LME's ongoing investment in the Ring, will ensure that the LME remains the venue of choice for all participants – and in particular, those physical players for whom the daily data system is a key element of trading, hedging and pricing activities.

Cost / benefit analysis

43. The benefits of enhanced monthly liquidity are broadly linked to the enhanced ease of trading for those market participants desiring exposure to monthly LME prompt dates. Existing market participants would be expected to find trading more efficient, in terms of visible liquidity on which to trade and reduced frictional costs of trading. New market participants, some of whom do not currently trade on the LME due to the perceived complexity of the date structure, may also become willing to participate on the LME.

44. One potential cost to certain market participants arises from the argument that the current method by which end users gain access to monthly liquidity, as set out in paragraph 12, results in a greater potential for fee income to LME brokers, and indeed to the LME itself if all trade legs are executed on the LME. Accordingly, a potential cost of this roadmap may be a reduced fee income for these parties. However, the LME believes that the incremental volume arising from further execution, and the business opportunities thus arising, will more than compensate for any such losses.

45. Costs may also arise from the emergence of the unintended consequences set out above in respect of fears that growth of monthly liquidity may reduce liquidity across the LME's date structure – however, as set out above, the LME believes that such risks can be appropriately mitigated.

46. The LME notes its own financial interest in enhanced trading activity, given the consequent potential for greater fee and ancillary revenues (although these may be offset by lost revenues pursuant to paragraph 44, as a result of incentive schemes, or otherwise)

47. Consistent with its normal procedures, the LME has discussed the matters discussed in this Notice with certain of its Committees in order to define this roadmap. Discussions with Committees were on the basis of the information set out in this Notice, with additional quantitative analysis of trading patterns and volumes across prompt dates and venues, based on confidential LME market data. Any market participant wishing to discuss or consider such data is welcome to contact the LME for a meeting. Such information not in this Notice may only be provided under confidentiality agreements, consistent with the confidentiality expected from LME Committee members.

Next steps

48. The LME is today issuing a consultation with members on changes to the order trade ratio as set out in step 1 above by Notice 15/022 : A022 (Consultation on Amendment to LMEselect Order to Trade Ratio Policy).

49. If appropriate, the LME will make further announcements in due course in respect of steps 2 and 3.

50. The LME is available to discuss any aspect of this Notice with any member or interested party, including providing any further clarification that is considered necessary to consider the issues addressed in this Notice.

Matthew Chamberlain
Head of Business Development

cc Board directors
User Committee
Trading Committee
Ring Dealers Committee
All metals Committees