Discussion Paper on Market Structure: Feedback Summary

September 2017

LME
An HKEX Company

SETTING THE GLOBAL STANDARD

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1. EXECUTIVE SUMMARY

1.1. Background to this feedback summary

In April 2017 the Boards and Executive of the London Metal Exchange and LME Clear (hereafter referred to as the "LME"), sought to solicit views from a broad base of stakeholders on the market structure of the LME, with the intention of ensuring that the future strategy of the LME is informed by those factors which are important to all participants who trade in, or rely on, its markets.

To this end, the LME published its 2017 Discussion Paper on Market Structure (hereafter the "Discussion Paper"), covering a broad range of subjects critical to LME markets, summarising its current understanding of these areas, and asking a number of specific questions of stakeholders and for any other relevant feedback.

The LME saw a positive engagement from both members and non-members alike, with many commenting that they were very appreciative of being able to engage directly with the LME in the important areas covered within the Discussion Paper.

The LME received an unprecedented total of 162 responses; 35 of which came from members, and, using the broad ecosystem terminology described within the Discussion Paper, 66 came from physical users, 19 from fundamental financial investors, 21 from systematic financial traders, and 21 from other respondents.

From all the interactions the LME had with respondents it was very clear that an enormous amount of effort was put into the process by all those who took part, and the LME would like to express its gratitude to all those who responded.

This document summarises the feedback received in response to the Discussion Paper, and how the LME has taken these views into account in reaching subsequent conclusions.

1.2. Structure of this feedback summary

To align with the Discussion Paper, this feedback document follows the same 6 sections; The LME Ecosystem; Trading and Booking Structure; Clearing Structure; Delivery and Physical Market Structure; Membership; and Volumes, Competition, Fee Structures and Growth.

Each section includes the "Summary" and previous "LME analysis" boxes as they were originally stated in the Discussion Paper. Then, on a question by question basis, this document summarises the responses received, along with how this feedback has shaped the LME's analysis of each topic.

Importantly, this feedback document should be read in conjunction with the LME Strategic Pathway document, which details the LME's strategic principles, strategic direction, and intended actions, which have been informed by the feedback received and summarised within this document, combined with the LME's own analysis and strategic aspirations.

The LME Strategic Pathway document also includes a "Summary" box for each section; this has been revised from the original box in the Discussion Paper as a result of the feedback received, and the LME's own analysis.

It is important to note that the goal of this document is not to give a verbatim report of all feedback received on each topic, but to give a summary of the opinions that were put forward. This is both to protect the anonymity of all those who responded, and to make this document more digestible to all stakeholders with interest in the subjects covered.

Respondents should be aware that, although the LME may not have specifically mentioned all opinions put forward, all responses were carefully read and considered by the LME and have informed the Exchange's understanding of the matters covered.

This feedback document does not constitute a binding commitment for the LME to implement any of the proposals set out herein. Any statement in this document as to the LME's intent or commitment to any proposal is a statement of LME's current intent. It is possible that the LME may reassess such intentions. The LME accepts no responsibility or liability to any person with respect to any action taken or omitted to be taken by such person in reliance on any statement made in this document. The LME may undertake subsequent consultations with its members with respect to the implementation of specific proposals, in accordance with its usual consultation processes and applicable rules. Furthermore, certain proposals may be subject to regulatory approval.

Nothing in this document should be construed as restricting any discretion of the LME to take such action as it considers appropriate in the operation of the LME, including through its determinations on applications for access to the LME's facilities. Nor should anything in this document be construed so as to require the LME to take any action.

2. THE LME ECOSYSTEM

SUMMARY

- **The underlying trading participants in the LME market can be divided into (i) physical users, (ii) fundamental financial investors, and (iii) systematic financial traders**
- **Members are the crucial link in bringing business to the LME. Historically, clients (especially physical users) have traded on the basis of prices quoted by members, who then lay-off some or all of the underlying risk on the LME's trading venues**
- **However, a significant portion of the market (especially in the financial community) now trades on the basis of displayed prices on the LMEselect screen, with members playing a brokerage role**
- **The LME believes that its three broad categories of user, facilitated by its members, together represent a mutually-supportive ecosystem. The LME is aware of concerns in respect of algorithmic traders, but believes these are common to most markets, and notes regulatory efforts to ensure that the activities of such participants are sympathetic to the other users of the markets in which they operate**

LME ANALYSIS

- **The LME believes that a well-functioning market can feature involvement from all three groups of traders identified in the LME's market mapping, given their broadly symbiotic relationship – however, the balance between the three is crucial**
- **Given the LME's market structure, members are instrumental in providing clients with the risk exposure they desire. The specific nature of the LME's market means that (especially for physical participants) it would never be possible to provide, on a central orderbook, the precise averaging exposure which clients seek**
- **The LME recognises market concerns in relation to systematic traders, but also recognises that many systematic traders generate volume and liquidity for the LME. The LME therefore believes the most appropriate course of action is in the context of broader sectoral regulation**

- **2.A Do you agree with the LME's market mapping? Are there other elements of the ecosystem which need to be considered in the context of this Discussion Paper?**

From the range of responses the LME received, there was clear support for the market mapping as laid out in the Discussion Paper. Many respondents highlighted that the diverse range of participants was a key strength of the LME, and that maintaining this diversity is of utmost importance. Within the context of the desire for diversity, it was also highlighted by almost all respondents across the spectrum that physical users play a key role in the LME ecosystem both through the making and taking of physical deliveries, ensuring price convergence of physical markets and LME futures contracts, and through their hedging activity providing a direct link to the supply and demand in physical markets, thus giving legitimacy to LME contracts, which then drives interest from other participants.

The LME agrees that the broad ecosystem of participants, underpinned by physical markets and users, is a core strength of the LME, and one which ultimately benefits all stakeholders.

Some respondents did highlight that they found the LME's described ecosystem as somewhat simplistic, with important nuances within each sector of the described ecosystem which should be recognised. In particular, many respondents highlighted the diverse range of firms and trading styles which would be categorised as systematic financial traders. Some respondents felt that the Discussion Paper unfairly focused on predatory, low latency, HFT style trading, where many systematic financial traders (often referring to themselves as proprietary, or principal traders) operate a trading model closer to that of an electronic market maker, working both bids and offers in the orderbook and adding liquidity to LME markets. The LME appreciates the helpful additional detail which many respondents gave, and agrees that understanding the nuances between various participants is very important.

Some, more traditional users, were more sceptical of the involvement of systematic financial traders, which they largely associate with "HFT" style trading, and question whether this is a positive addition to LME markets, and how this style of trading benefits other stakeholders in the LME ecosystem. That said, these traditional users were also, in general, not averse to a broad range of participants being active in the market, and generally did support the diversity of the ecosystem.

Similarly some respondents felt that there is more potential diversity of business models across LME members than described in the Discussion Paper. In very broad terms; it was highlighted that LME members traditionally provide three distinct services; broking, clearing, and market making, and the LME membership model has historically been optimised for member firms to provide all three of these services, whereas, on many other global futures markets, these three services can be provided by different types of firms, with the role of "clearing member" and "trading member" being somewhat distinct. It was similarly highlighted that not all LME members act in the traditional "dual capacity" as both a broker and market maker in their interactions with clients.

- **2.B Do you agree with the proposed approach to systematic trading strategies on the LME market? Would you wish the LME to investigate technical approaches to mitigate the potential benefits of speed on the LMEselect market?**

The responses to the Discussion Paper showed extensive support for a fair access model for all types of participant, in which no participant is advantaged or disadvantaged over another and transparency is encouraged. LME agrees with the sentiment that no class of participant should have preferential access to LME markets, and that there should be a fair access model for all.

There was a broad range of opinions in regard to systematic trading strategies, even from within each type of respondent. Some traditional physical users questioned the value that systematic trading strategies bring to LME markets, feeling that "point and click" traders and physical users were disadvantaged, while other traditional physical users thought that systematic trading strategies brought more liquidity to markets which is used by all other participants.

Generally, the view was that the LME should encourage all participants, but that it should continue to monitor trading activity to determine any negative practices with regards to liquidity and take steps to reduce such practices.

There was a similarly broad range of opinions regarding the LME looking at technical approaches to mitigating the potential benefits of speed. Some traditional physical users felt that the LME should implement speed bumps to remove the advantage of electronic traders, though few of these respondents expressed an opinion as to how long this speed bump would need to be. Other respondents felt that any kind of increased latency introduced by the LME would deter some business away from the LME and ultimately be negative for liquidity; this was a view held by some respondents from across the spectrum of the ecosystem, including physical traders and financial traders alike.

Some respondents went into significant detail in explaining the difference between other markets where speed bumps have been applied (such as US equity markets), and how their market structure differs to that on the LME, opining that the impact on LME markets would be to reduce the ability of market makers to update their quotes, thus leading to wider bid-offer spreads and smaller sized quotes.

Some systematic financial traders highlighted some specific areas where a speed bump may help to protect liquidity on the LME, particularly where very expensive infrastructure only available to a limited set of firms allows a latency arbitrage to other highly correlated markets. In this scenario, a speed bump on new incoming orders, which would not apply to cancellation orders, may help to protect liquidity as market-makers have the opportunity to remove a quote even when they do not have access to the fastest infrastructure. As such the risk of being “picked off” is heavily reduced, which allows market makers to quote bigger sizes, at tighter prices. That said, there were also systematic financial traders who disagreed with this approach, and felt that it would result in market makers often cancelling orders before they could be hit, and thus reduce available liquidity.

The LME understands the concerns raised around systematic financial traders, and believes that any technical approach to mitigate the impacts of speed must be carefully examined before any implementation, and should target specific problems caused by speed, rather than a broad-brush approach which could deter electronic traders. In all instances, the goal should be to protect the liquidity, and thus usability, of LME markets for all participants. The LME believes it is not prudent to make any immediate changes in this regard, but to explore what technical approaches may be taken to alleviate specific issues in the longer term.

Some respondents also surmised that systematic financial traders often add orders one tick above or below the existing top-of-book order, thereby “jumping in front”, of other orders in the market which is a particular source of frustration. Although it appears the majority of frustration is in outright markets, it was also highlighted that the small tick-size in calendar spreads on LMEselect was at times a problem.

The LME believes it may be worth exploring some tick-size changes as part of its ongoing “business-as-usual” operations to assess whether it is possible to minimise the frustrations caused by small orders “jumping in front” of other orders, and thus maximise available liquidity.

3. TRADING AND BOOKING STRUCTURE

SUMMARY

- **The LME's trading and booking structure is highly differentiated, marked specifically by (i) its distinction between exchange and client contracts, (ii) its three venues, and in particular its inter-office market, and (iii) its date structure**
- **These three features are interlinked, and evolved primarily to facilitate a model whereby members make bespoke risk prices to clients, which can then be fully or partially hedged by the members on the market**
- **While this remains a powerful functionality of the LME's market for bespoke client requests, the strengths of the system can also be used to avoid the use of the LME's central liquidity pools when executing more standardised business. As financial participants increasingly demand (in particular) a visible pool of third Wednesday liquidity, the LME's market structure provides incentives for such business to be executed through a variety of alternative routes, which results in dispersed liquidity pools which reduce both the perceived and actual liquidity of the market, and may inhibit the uptake of LME trading**

LME ANALYSIS

- **The LME believes that its T4 booking structure, inter-office trading and date structure facilitate the market's unique ability to make bespoke risk prices to its physical market clients, and would not propose to modify this underlying proposition**
- **However, when applied to more liquid prompt dates (and, in particular, third Wednesday outright trades), the LME is concerned that its market structure does not provide proper incentivisation for the use of its "lit" execution venues**
- **The LME believes that this has a number of potentially significant negative consequences, including (i) depriving the market of full pre-trade transparency with the result that certain clients choose not to participate in the LME market, (ii) creating a significant fee disparity between participants based on their particular business model, and (iii) the concentration of activity in the hands of a more limited number of members with aggressive internalisation strategies**
- **The issues relating to the T4 booking model are related to operational complexity and fees. Potential fee modifications are covered in Section 7.2.2, and a proposal for a client clearing solution is covered in Section 4.3.2**
- **The issues relating to inter-office trades could be addressed by rules on the use of such trades for liquid LME prompt dates, and greater transparency through the implementation of market-standard EFRP transactions**
- **The date structure is fundamentally a positive for the LME, and the only point at issue is that of the electronic liquidity inception point – that is to say, whether users of the electronic market would more naturally wish to enter positions via the three month forward date, or a fixed third Wednesday date, or, indeed, utilise a separate financial contract. While the LME does not propose to precipitate a change to trading behaviour via its rules, it believes that it must plan for a potential industry-led managed transition to a more monthly market structure**
- **The LME continues to believe that the Ring represents the appropriate venue for the**

assessment of its prices, while recognising the continuous need to ensure the resilience of pricing and the alignment of observed Ring and electronic prices

DISCUSSION QUESTIONS

- **3.A Do you agree with the LME's analysis of the advantages and disadvantages of the T4 contract booking structure? Do you believe that the market should be concerned by the fee incentives to book clients OTC, rather than via an LME client contract?**

In general, the feedback received agreed with the LME's analysis of the advantages and disadvantages of the T4 contract booking structure. The responses both dealt with the direct impact of the T4 booking model, but also some of the indirect consequences.

In particular, traditional members and users of the Exchange felt that the flexibility provided by the dual capacity (as both market makers, and brokers) nature of LME members (which is afforded by the T4 booking structure) is a key attribute of trading on the LME. Physical users felt that the bespoke nature of LME markets, and in particular the date structure (which is itself discussed in section 3.D below) meant that members being able to intermediate their trades is essential. The LME very much understands the importance of this flexibility, particularly to those who use the Exchange to accurately hedge physical metal exposures, and believes that it is very important that this flexibility is maintained.

Some respondents did feel that where members and clients wanted to be able to trade LME markets in a manner more common to other futures markets (i.e. facilitating client trades through electronic direct-market-access, or agency style brokerage), the unique T4 booking structure did add some hurdles, particularly for new participants who need to adapt IT systems (which are set up as T2 for other markets) to enable them to trade on the LME, and were very supportive of the simplicity of the T2 booking model.

Members who already have systems set for T4 trading felt that the cost to move to either a hybrid booking model, or a full scale change to T2, would be operationally expensive to implement.

Some financial participants expressed the view that the T4 booking structure helps LME members to keep control of the market because they are able to intermediate all trades, and that a more standardised T2 model would be preferable.

From the LME's perspective, the flexibility afforded by the T4 model is clearly important to many participants, and is key to the usability of the market by many physical users. However, the LME does believe there would be value in also offering an optional T2 booking structure for those members and clients that would like to use it.

The indirect consequences of the T4 booking model were also specifically mentioned by many respondents. The fee impact was relatively high up the list of concerns, with respondents across the spectrum highlighting that the T4 structure results in clients in general paying 3x the member fee. In conjunction with this, many respondents across the spectrum did feel that the market should be concerned by the fee incentives to book client business OTC. Though many other points were also highlighted; several respondents felt that the size of the OTC market was relatively limited compared to the LME market (though still agreed that fee incentives should be addressed), and several respondents asserted that the incentive to go OTC has only existed since the overall level of fees has risen to the point that fees now have a material impact on businesses. It was also highlighted that business going OTC should be a concern as it takes liquidity away from the central venues.

The LME is certainly receptive to these concerns, and would highlight that while the differential fee levels are not a necessary consequence of the T4 booking structure, it does make setting the correct level of fees more complicated on LME markets compared with other futures markets. While fees will be discussed in more detail in Section 7, the LME does believe it should look to address the fee incentives to take client business OTC, while keeping in mind any consequential impact of changing fee levels.

The other consequence of the T4 booking structure which was highlighted by some financial participants is that LME volumes cannot necessarily be directly compared with other futures markets, as a single client trade may result in multiples of volume reported (due to the client-to-member legs, and member-to-exchange legs), depending on how trades are executed and hedged. The LME is sensitive to this concern and will continue to work to make individual transaction reporting and overall trade data reporting as transparent as possible to give market participants the maximum amount of information within practical constraints.

- **3.B Do you agree with the LME's view that the Ring continues to represent the best venue for pricing activity? Do you see any need for a more formalised "trade at settlement" functionality?**

This question was one that prompted some of the biggest divergence in views, and some of the most strongly held viewpoints, both for and against the use of the Ring for pricing activity. While there are some broad generalisations that it is possible to make, there were a huge range of views held by all different types of respondents.

One clear message across the board was that whatever venue is used for price settlement purposes, it is critical to maintain a high concentration of liquidity around these pricing points to ensure the reliability and legitimacy of LME pricing.

Unsurprisingly, the category 1 (Ring-dealing) members of the LME were very supportive of the Ring, believing it to be a transparent and efficient way to concentrate liquidity for price discovery of settlements (both Official Settlement Prices at the close of the second ring, and for end-of-day closing evaluations), and particularly in carry trades due to the length and granularity of the date structure for most LME metals.

It was articulated that this transparency and human presence has meant that the Ring as a price discovery venue has remained free from the regulatory controversy seen on some other financial markets, such as LIBOR. It was also highlighted that the history and tradition of the Ring brings legitimacy to LME markets and brand value to the LME, which drives client interest.

These positive views were highlighted by many other respondents (both members and clients), and while it is a position held by some stakeholders from all areas of the LME ecosystem, in general the more traditional physical users were the most supportive of the Ring as a pricing venue. It is worth noting that these participants are generally most interested in the Official Settlement Prices established in the second ring sessions (particularly the Cash, T+2 contract), which are normally used as references within physical supply contracts.

The LME has historically been, and remains, very supportive of the Ring, agreeing with the aforementioned views that it provides a transparent venue for concentrating liquidity, and has conducted significant internal study and market engagement to ensure optimal functioning of the Ring.

Several of the respondents that were supportive of the Ring as a venue felt that pricing in the Ring could be improved by some amendments. Some pointed out that the practice, by Ring-dealing members, of transacting large orders outside of the Ring sessions (such as “crossing up” closing orders) has meant that there is lower actual participation during the Ring and Kerb sessions, potentially jeopardising the price discovery process. The LME entirely understands these concerns, although believes there is a balance to strike, allowing Ring-dealing members to offset risk where appropriate, while maintaining the legitimacy of the price discovery process. The LME also continues to believe it is appropriate to incentivise trading in the Ring as one of its “lit” execution venues and ensure adequate liquidity.

One other amendment that was suggested was the potential to move to a single settlement price for the second ring closes, rather than the currently published bid and offer prices, as it was thought that additional simplicity here would be beneficial. It is worth noting however that some other respondents with particular physical interest highlighted that the “best-of-four” pricing (Cash bid, Cash offer, 3-month bid, and 3-month offer) is used extensively in some metal supply chains and thus moving away from publishing both a settlement bid and offer could cause some problems.

The LME also received many responses that were highly critical of Ring pricing and trading, specifically as the venue used for settlement purposes. While certain respondents who expressed these views may well be opposed to open outcry trading in general, most respondents took time to highlight specific problems they saw with the LME’s current settlement procedures on the Ring, with suggestions as to how the process could be improved.

Again, the views were held across a wide range of respondents, members and clients both physical and financial, although in general terms, the desire for a more radical change to the settlement process away from the Ring was held by the more financial participants, and the larger, more active physical users who are in general more likely to trade electronically. Generally these respondents were more concerned (although not exclusively) with the end of day closing evaluations, rather than the second ring settlements.

Many respondents felt that the Ring is a relatively antiquated system of trading, and that most other global markets have shown that electronic settlements work effectively. It was highlighted that the Ring is not a transparent venue generally, with only 9 firms able to directly access it, and a requirement to be a full clearing member in order to trade on the Ring. While it was acknowledged that almost any participant generally is able to pass orders to a Ring-dealing member should they wish to participate in the settlement process, it requires a relatively large operational cost to do so, compared to entering an order electronically, particularly for those participants who transact across a large number of electronic futures markets and attempt to keep their operational costs to a minimum. It was also highlighted that open outcry trading is much slower than electronic trading, so non Ring-dealing participants are much less able to respond to fast price moves.

Several respondents pointed out that the vast majority of liquidity during the trading day (particularly in 3-month outright trading), was found on LMEselect, and thus the settlement procedure should use this venue rather than artificially driving volume to another venue for settlement purposes. It was also pointed out that the current Ring settlements mean that a participant can have an order in the LME's central limit orderbook (LMEselect) and the price can settle through that order, without the order being filled.

Several respondents felt that the current settlement process is conducive to questionable trading practices, particularly the fact that the settlement price is based on the last trade, which leads to a concentration of trading in the last moments, and an inability of participants to respond to price moves. Some respondents felt that LME settlements are regularly away from where the market is trading electronically, and that in their opinion this, combined with the relatively lower transparency led to a significant lack of confidence in LME settlements.

These respondents were generally very comfortable with the fact that large trades and risk transfer during settlement periods can move markets, and that the period of price settlement generally can have high volatility, but highlighted their opinion that, too often on the Ring, a relatively small order has been able to move markets significantly.

Generally from these respondents, the desire was for the LME to explore alternative settlement procedures. An electronic VWAP was mentioned by many as the best method, where any market participant can be involved in the process, and there is less incentive to "chase the close" as all trades during the VWAP period are taken into account.

It is worth noting that some respondents felt that a hybrid solution would be optimal for the LME, where the 3-month price was settled electronically, while the curve shape was settled on the floor with carry trading. It was felt that this solution was particularly attractive as it allowed maximum participation in outright price settlement to anchor the curve, while utilising the Ring to set a complex date structure, in which the Ring currently plays a large role in trading during the day, and which may be difficult to capture with only electronic trading.

While the LME does believe that Ring settlements very much continue to represent a legitimate pricing process, and that LME has well established procedures to ensure good trading practices, there is some clear support for exploring alternative settlement procedures for the end of day closing evaluations, likely trialling at least some part of the process electronically.

As was recognised in several responses, the LME believes it is very important to work with the market in this process, to make any changes carefully, ensuring that the settlement process is clearly understood, and that all business flows are still able to be transacted in an efficient manner.

Moving on to the question of a more formalised "trade at settlement" (TAS) functionality; again there were a wide range of views, but in general it was felt by members that this functionality already exists in the form of market-on-close (MOC) orders, which most LME members will provide to their clients. Some respondents highlighted that a more formalised TAS functionality may actually have the undesired consequence of taking orders away from the Ring, and thus diluting liquidity, and affecting Ring settlements. Some respondents felt that the complex, granular nature of the LME's term structure would not work well with TAS.

Where respondents were supportive of TAS functionality, it was generally in conjunction with some form of electronic settlement process, as TAS would then help market participants to manage their price risk against settlement in an efficient manner.

The LME understands and broadly agrees with both sides of this issue; that is, that with the existing Ring settlement process, the solution which TAS provides is already offered within the market, although when exploring an electronic settlement process, it is likely that TAS functionality would be beneficial to help market participants manage risk. It is not likely to be practical to have a full curve of TAS contracts, but rather to concentrate on a few key liquidity points such as 3-month, and potentially some nearby monthly spreads. The LME intends to engage with the market in determining exactly which TAS contracts would be most useful.

- **3.C Do you agree with the LME that the inter-office market is an important flexible tool for the transacting of business on illiquid prompt dates, but that it is appropriate to review whether more stringent rules should be considered for liquid prompt dates, to ensure that the booked trades correspond to the underlying flows of gross business between members? Furthermore, do you believe that EFRP transactions should be implemented?**

In general, the vast majority of respondents strongly agreed with the LME that the inter-office market is an important flexible tool for transacting business on less liquid prompt dates. It was highlighted that this is particularly important for physical participants, who are heavy users of the granular term-structure of the LME, which allows them to accurately hedge their physical exposures.

Some participants felt that any rules which are more stringent would only be detrimental, making trading less flexible, and prevent certain types of business being done.

Some members articulated that the underlying flows of gross business between members is booked directly on to the LME with little netting taking place, though there was some divergence in this view, as others were keen to make sure that more stringent rules are not put in place as they believe they benefit from this netting.

Some of the more financial participants (both members and clients) thought that it would be beneficial for the LME to implement some more stringent rules, specifically to try to drive trades in liquid contracts to the central limit orderbook to build centralised liquidity. This might include, for example, some sort of Block type rules to the effect that any trade below 5 lots in liquid prompt dates may only be transacted in a centralised venue. Within this context, it was understood that there is a balance to be struck between allowing for the positive flexibility, while fostering liquidity in central venues. It was also highlighted by some respondents, that it may be useful for the LME to offer RFQ type functionality in LMEselect, to allow pricing of illiquid prompt dates in an efficient manner. The LME considers that there is potentially value to the market in such functionality, though this point is further discussed when considering a permissioned dealer-to-client platform in question 3.F below.

The LME agrees that the flexibility of the inter-office market is a key attribute for many members and clients, and would not want to damage this, though in general the LME is openly supportive of promoting “lit” trading venues to increase both transparency and liquidity. The LME believes it should look in to rules to ensure that its venues are used appropriately, and not misused in order to deprive the market of transparency or liquidity, while protecting the flexibility important to the physical market.

Regarding Exchange of Futures for Related Position ("EFPR") rules, while broadly there was not much objection to this type of activity and some respondents felt that any increase in ease of bringing OTC positions to the LME would be beneficial, many respondents felt that the LME's existing OTC bring-on functionality is sufficient, and were concerned that change to the rules may end up being restrictive of existing business practices.

Broadly the LME understands and agrees with these opinions. While the current OTC bring-on trade type is sufficient for existing business practices, it may be prudent to re-visit this issue in time, as new market practices evolve, particularly in new markets the LME is developing (such as ferrous contracts) where there may be substantial OTC business between two non-member entities, and it could be advantageous to offer an easy way bring these trades on to the LME.

- **3.D Do you agree with the LME that the flexibility of the date structure is a key asset for the market?**

The following three questions around the flexibility of the daily date structure, the liquidity inception point, and any potential transition are very much intrinsically linked. Consequently, while the questions and responses are separated as per the questions, the responses received clearly considered the question of date structure and supporting infrastructure to be a single large question.

This was another area that saw some very strong viewpoints, both from traditional members and users of the LME, and newer more financial participants. Again, the views were not completely differentiated in this manner with some respondents across the spectrum having divergent viewpoints to their peers; however, there were some key themes.

One common thread touched on by most responses was that considerations of liquidity are of utmost importance, both preserving the liquidity the Exchange has, and promoting further trading to improve liquidity. That said, where that liquidity lies within the date structure, and how it is accessed are the areas where there is divergence of opinion.

Broadly, the more traditional, generally smaller commercial physical users trading on the LME, and the more traditional members are very supportive of the current daily date structure, and concerned by any suggestion of changing it. They see the Cash settlement price as paramount due to its importance in physical supply contracts and a key consequence of the daily date structure, which then also allows accurate hedging of future Cash price exposures. They are of the view that any change to the date structure could have the unintended consequence of jeopardising the Cash price by reducing liquidity in the daily dates, and lead to the loss of the unique structure of LME contracts which they see as the driver behind the LME's position as the leading global metals exchange. The "best-of-four" pricing used in some industries was again highlighted as meaning that not only the Cash price, but also the 3-month price is important to physical stakeholders.

In general, the larger commercial physical participants, and some physical merchants, were open to evolution of the current daily date structure. While they highlighted that the ability to make and take delivery on a daily basis is very important to physical metals markets generally, a rolling 3-month contract was not necessarily required for this purpose, and it may be possible to cut down the number of available daily dates - there were several suggestions of how to do this, such as only opening up all the daily dates of the next available month on the 1st of each month i.e. on 1st August, all dates in September would become available (and August dates would remain available). A monthly contract would then be used as the liquid electronic inception point. They believed this would help to concentrate liquidity on fewer dates, and help bring new participants to the market who are currently put off by the unique date structure of the LME. Some respondents in this group thought that a monthly structure more similar to other commodity futures markets, with a monthly delivery window (rather than daily structure) would actually be a better solution for the LME, as physical supply contracts could move to an “average of spot month” pricing basis, liquidity would be much more concentrated on a few key contracts, and the standardisation to other commodity markets would allow for many more participants to be involved.

The LME understands the views and concerns from both of these perspectives, and while metals markets may be capable of a large transition to a very different pricing model, the LME believes that the certainty to be able to make and take delivery on any business day, and the significant flexibility this provides physical users in accurately hedging different pricing exposures using listed contracts is a key strength of its market. Clearly there is a balance to be stuck between providing this flexibility, while having more standardised contracts, and a simple enough structure to promote maximum participation and drive increased liquidity.

Among the more financial members there was still a relatively broad range of views, generally acknowledging the importance of the Cash price, and the beneficial flexibility of the daily date structure. While they are open to some evolution to simplify the structure and see that this would bring benefits they generally do not want to see wholesale changes, but rather tweaks such as those discussed in question 3.E and 3.F below, to help concentrate liquidity and make access to LME markets easier for all participants.

Broadly, fundamental financial investors suggested they do not use the full flexibility of the daily date structure, preferring to either trade a monthly contract at inception (if largely trading Inter-office), or if they are primarily trading electronically then they will chose to adjust their 3-month executions to monthly contracts. This is due to a desire to reduce overall trading costs, which are made up of bid-offer spread, exchange and brokerage fees, and operational costs. While these participants understand the importance of flexibility (and the Cash price) to physical users and certainly want these users to be part of the market, they are strongly supportive of a move of the electronic liquidity inception point to be monthly contracts as they believe this would reduce costs to trade, and increase liquidity (more on this in question 3.E below).

This desire for a move to monthly contracts also stemmed from a desire to trade spreads electronically, as many fundamental financial investors also trade calendar spread strategies on other commodity futures markets, but generally do not trade spread strategies on the LME as they feel that electronic spread liquidity is not high enough.

Systematic financial traders generally also do not use the flexibility of the daily date structure, and similarly find the lack of electronic liquidity in monthly spreads to be a detriment. There was a range of views as to whether the LME should look to simplify its structure, and while some respondents desired a lack of change as they have already built their models to the existing LME market structure, there was a broad opinion that a standardisation would bring more participants to the market, and allow them to implement further strategies, such as calendar spreads.

- **3.E Do you believe that, within the context of the date structure, the electronic liquidity inception point should remain as a rolling forward three month date, migrate to a fixed third Wednesday date, adopt a hybrid model, or migrate to a separate financial contract? If you support evolution, over what time period do you believe that such evolution should take place?**

Across the board, all respondents were mostly concerned with liquidity, and the potential impacts that changes would have.

While there were a small number of responses that were supportive of a separate financial contract, it was generally felt that this would be a significantly negative step, and would be unlikely to be successful in the first instance. This is because for most traders, considerations of liquidity are foremost, and thus they would not be “first movers”. Even if it was successful, it would split liquidity.

As with question 3.D, broadly the traditional members and smaller commercial physical participants responded that they did not want to see any changes to the date structure, which included a desire to maintain the 3-month contract as the electronic liquidity inception point. They felt that the 3-month contract is historically important to the LME, and as previous mentioned forms part of some industries’ physical pricing. It was also highlighted that much of the open interest in “broken dates” (generally any date which is not a 3rd Wednesday, or Cash, or 3-month on any given day) is residual open interest from when that date was the 3-month contract, and without this residual open interest they believe that liquidity for broken dates will be compromised which will ultimately lead to a lack of liquidity in the Cash price and thus jeopardise physical contract pricing.

While the LME does understand that this residual open interest may add volume traded in broken dates, and at the margin help liquidity, the LME believes that the Cash contract can stand-up on its own as an important reference price. Importantly, if there is not enough “natural” business in daily dates and the Cash price to support the required liquidity, then this brings wider questions as to the real use of the Cash price, and its legitimacy. Moreover, it does not make good sense for the date structure to be built around supporting a price reference which can only survive by maintaining inefficiencies in the market.

It was also highlighted that at times this residual open interest actually adds to spread volatility and instability, as many “trapped” positions have to be moved – particularly after high volume 3-month days, where a large volume of investor positions were established in the same direction, and adjusted to a 3rd Wednesday, leaving members with large residual broken dated positions in generally illiquid prompt dates.

Again, more financial members, some larger physical users, commodity merchants and fundamental financial investors were supportive of moving the electronic liquidity inception point to one of the 3rd Wednesday monthly contracts. Particularly from the fundamental financial investors there was the strong view that this would help to reduce inefficiencies of trading on LME markets.

It was pointed out by some members that, generally, hedge funds find a way to trade any market they want to be involved in, and have traded on the LME for many years. Consequently, the market structure does not need to be changed to accommodate them. Several funds (categorised as fundamental financial investors in the Discussion Paper) went to into a large amount of depth in explaining all the relevant costs associated with trading LME markets, and why the inefficiencies result in restricted trading. The “3-month and adjust” model of trading means both that an increased number of bid-offer spreads have to be crossed, and extra exchange and brokerage fees paid, all the while reducing transparency of pricing. There was the clear message from many respondents, including but not limited to hedge funds, that they would rather be trading a 3rd Wednesday monthly contract directly, but ultimately they are driven by liquidity, so are unable to be first movers unless the rest of the market also moves. They felt that a wholesale move to monthly contracts as the liquidity inception points would result in significantly more liquidity for all participants on the LME, and help to bring new participants who are currently deterred by the complexity of the LME term structure. Some respondents highlighted that they felt that the existing market structure protected LME broker margins due to its inefficiencies, but was not good for the market as a whole.

Broadly, respondents who did not want to see a change to the liquidity inception point highlighted that any change should only be driven by market forces, and if a change was desired then it would happen naturally. On the other side of the coin, those respondents desiring a change generally felt that a more pro-active approach needed to be taken. Several of those respondents themselves generally trade the "3-month and adjust" model, and pointed out that they will always have to trade the most liquid contract, so would not be able to be "first mover" but if a large scale change was enacted to the liquid inception point being a monthly future, this would be a huge benefit to them, and would likely result in them trading higher volumes. That said, many of these respondents were highly supportive of the "user choice" model with implied pricing on LMEselect, as it would not disrupt the current market, while allowing those who want to change to do so while still accessing the maximum liquidity available (discussed further in question 3.F).

- **3.F Do you agree with the LME's proposal to adopt a two-phase process, with the first phase being a "user choice" model whereby electronic monthly liquidity is made available but no incentive is provided to adopt such trading, and a second contingency phase is undertaken if it becomes apparent that the LME market is losing significant volumes due to the absence of a liquid third Wednesday offering? If so, (i) which infrastructural developments would you support to achieve the "user choice" model of the first phase, and (ii) what "trigger criteria" would you propose in respect of the second phase?**

As noted above, there was a split in opinion as to how proactive the LME should be in moving the liquidity inception point. The more traditional participants who did not want to see a change strongly felt that the LME should not take any proactive steps, and the market alone would drive any change if it was desired. Participants with more revolutionary views were generally of the opinion that the LME should take steps to move the market towards a monthly contract as the liquid inception point as liquidity will not shift of its own accord – even if the market would benefit from this change - and that all market participants would quickly be able to adapt to this.

Across the board, however, there was relatively strong support for an implied pricing solution in LMEselect, to be able to chain the 3-month contract to some of the monthly contracts, thereby allowing any participant to trade the contract they desire, while accessing the maximum possible liquidity.

The only concern with implied pricing was from those that felt that any shift towards monthly contracts would result in the daily date system no longer functioning due to lower residual open interest. While the LME does understand this point, it is effectively an argument that implied pricing should not be implemented as it may be too successful. As mentioned previously, the LME believes that the daily date system can thrive due to its usefulness to market participants, and open interest in the daily dates does not need to be “artificially” increased by the residual of 3-month trading.

There were several suggestions as to how many different dates should be implied with some respondents desiring fewer implied dates to ensure that liquidity is concentrated as far as possible, while others wanted a larger number of implied months to give greater choice. Several respondents highlighted that implied pricing will rely on liquid spread markets on LMEselect. The LME believes that implied pricing will provide significant useful functionality to the market, and will work with members and other participants to determine the outline of which contracts should be implied, and to ensure that spread liquidity is adequate to maximise usefulness.

While there were relatively few direct calls for the LME to develop a permissioned dealer-to-client platform, with most respondents seeming to desire the central LME markets being made more liquid, rather than splitting liquidity in any way, there were some mentions of specific areas where some form of RFQ functionality provided by the LME may be useful, such as in pricing less liquid spread contracts. In general the LME considers that it should continue to monitor the available potential solutions, and those already use in the market (such as the single-dealer platforms), to determine whether at some point it would be advantageous for the LME to offer a centralised solution. This could be as part of the central orderbook offering, as a stand-alone platform offered by the LME, or by working with third party providers.

4. CLEARING STRUCTURE

SUMMARY

- **The LME currently uses Discounted Contingent Variation Margining ("DCVM") as its variation margin model which involves profits on a trade not being paid until the settlement date of the contract; some market stakeholders have suggested that an alternative approach – specifically Realised Variation Margin ("RVM") that is common across virtually all other exchange traded and cleared markets – might represent less of a barrier to entry to the LME market and will free up capital for many market participants**
- **The LME calculates Initial Margin using the CME SPAN methodology[1]. This remains a highly effective and regulatory compliant approach to clearing; however, this methodological approach does have disadvantages as well as advantages and is typically less accurate than more sophisticated margin models such as Value at Risk ("VaR") which would better capture the date structures and spread risks of LME portfolios. Many market participants have suggested that, despite the additional complexity of a VaR model, the enhanced accuracy would free up capital for market participants and allow for the provision of greater credit to clients**
- **The LME believes that it can further enhance its clearing solution by providing a broader set of client clearing solutions, in respect of booking structure, contract flexibility and risk controls**
- **Offering an OTC-cleared solution for base metals derivatives contracts which reference LME prices alongside the existing exchange contracts would provide members with additional flexibility to introduce client business to central clearing which has been executed OTC under different contractual models**

LME ANALYSIS

- **The LME understands its current clearing methodology – both for variation and initial margining – to be functioning effectively. However, it is also cognisant that other methodologies may offer greater functionality and market access – and, as such, is happy to consider a transition**
- **The LME is aware that it is unique in continuing to apply a DCVM model for variation margin and there are many advantages to a potential migration to RVM; however, this needs to be considered in the context of the impact of credit provision to clients and the associated implications for client "porting" and default management**
- **Adoption of a VaR-based model to replace a SPAN-based model would likely lead to more accurate levels of initial margin for a given level of market risk. VaR-based models are increasingly considered to be industry standard and most members, clients and ISVs have systems that can cater for VaR based models**
- **Providing a GROSA account as an alternative to a NOSA account may provide additional opportunities for members to provide services to certain types of clients who do not require credit extension**
- **The LME believes that it should provide central utility solutions that enable members**

[1] "SPAN" is a registered trademark of the Chicago Mercantile Exchange Inc., used herein under licence. Chicago Mercantile Exchange Inc. assumes no liability in connection with the use of SPAN by any person or entity

to provide additional services to their clients

- **The LME could offer members the ability to provide, in addition to the current T4 model, a client clearing model based on a T2 booking model, where members are offering an agency execution service that will enable their clients to book trades directly to the client account without having to book through the member's house account**
- **The LME could offer members the ability to clear for clients certain additional types of contracts in addition to those currently offered on the LME trading systems, including additional currencies, averaging contracts including balance-of-month contracts and cash-settled contracts in non-standard sizes**
- **The LME could enable members to manage client exposure through an additional series of controls, including position-level controls and margin-level controls**

DISCUSSION QUESTIONS

- **4.A Do you agree with the LME's assessment of the relative benefits and disadvantages of DCVM and RVM?**

The majority of market respondents had a view on the relative assessment and benefits of DCVM and RVM. Market participants were keen to point out that there was significant additional detail within the uses and benefits of both DCVM and RVM. The responses captured this and there were a number of participants who argued strongly for the continued use of DCVM. The basis for the use of DCVM was essentially that it provided for increased credit extension by clearing members to their clients through the use of offsets within the client account and reduced payments and liquidity flows to both the CCP and also the clearing member. There was some concern expressed by these respondents that the removal of this netting would reduce the amount of credit available and put increased liquidity demands on those clearing members, who extend significant credit, and also clients who may need to make more frequent cash payments under an RVM model. It was notable, however, that several client respondents were not comfortable with the level of netting of DCVM flows in a net omnibus segregated account (NOSA) that provides this credit and the associated inter-customer risk that results, and these clients expressed a desire to move to RVM to reduce this risk. One clearing member noted that there would be tax implications of cash movements under RVM that will need further investigation.

The majority of respondents, however, noted that most other futures markets utilised an RVM model and that this would provide simplicity to the majority of market participants and would reduce barriers to entry. Several respondents noted that DCVM was the largest inhibitor of access to the LME and prevented them from utilising the LME further. Many larger clearing members noted that the regulatory capital implications of DCVM made it important that LME moved to RVM and that the additional interest rate risk of DCVM was undesirable. It was notable also that many of the responses from financial participants and the larger physical users of the market argued strongly for the use of RVM.

There was very little feedback on the default management porting implications of DCVM and RVM with some clearing members noting that this element was not fully understood by the market and that the LME should provide some additional clarity.

- **4.B Do you agree with the LME's assessment of the relative benefits and disadvantages of SPAN and VaR?**

The majority of market respondents agreed with the LME's assessments of the relative benefits and disadvantages of SPAN and VaR.

Many respondents were keen to point out the criticality of margin to a clearing house, and that as a systemic risk-taking entity it was critical that the level of initial margin was appropriate to reflect the risk that was being assumed by LME Clear. However, many respondents also noted that the levels of initial margin for some contracts was high and that the risk posed by spread positions across the date structure in particular was margined at too high a level. Many respondents noted the familiarity and simplicity of SPAN as a benefit and that many smaller clients were keen to have predictability over the levels of initial margin. Many of the larger clients and clearing members noted that VaR is a market standard in many other cleared markets but urged caution in the adoption of VaR to capture the unique characteristics of the LME market.

- **4.C Do you consider that the LME should move to an RVM model? If so, over what time period, and using a "big bang" or rolling method of transition? Do you agree that such a transition should not take place until the LME has ensured that other collateral management solutions have been introduced for those clients who may be impacted by a reduced availability of financing?**

Overall, the majority of responses favoured a move to an RVM model; however, the views were different by participants and the business model of the clearing member.

At the clearing member level there was some concern that the loss of DCVM, and the associated netting benefits across clients as described within the Discussion Paper, would potentially lead to increased cash flows and thus a reduction in the overall level of credit that they were able to make available to clients of the market. This was echoed by the smaller physical clients who noted their reliance for trading upon the extension of credit from their clearing members.

The larger clearing members, financial participants and many larger physical clients were unconcerned about the issue of credit provision and noted that RVM is a standardised model in all other futures markets and that a change would overall increase the ability of clients to access the market. A number of Chinese clients noted that the current currency controls within China made the daily payment of US dollars difficult and some saw this as an obstacle that would increase their reliance upon credit extension. However, many of these Chinese clients, whilst noting the issue, also confirmed that the daily payment of variation margin flows was accomplished on other futures markets.

There was no overall consensus on the time period for transition to RVM with many clearing members and clients requesting strong market engagement and a suitable time period for implementation. The time period for implementation was driven by a number of factors including IT and business model changes, the need to engage back-office vendors in the process, and the need for clients to adjust to the daily payment and ensure that where they were reliant upon credit, that this would either continue to be available or that they were able to make cash payments.

There were no strong views expressed on the availability of additional collateral offerings although several clearing members noted that anything that improved the ability of clients to mobilise LME warrants (and to the same extent non-warranted metal) would be welcome. Several clearing members noted that the current charging structure for pledging LME warrants as collateral with LME Clear was technically challenging and acted as a disincentive to use of the service. These clearing members also noted that the restrictions in EMIR that prevented the use of LME warrants as a generic form of collateral requiring them to be used “like-for-like” (i.e. aluminium warrants could only be used against aluminium margin requirements) also acted as an deterrent to efficient use of collateral and encouraged the LME to raise this issue with the relevant authorities.

Despite the broad support for RVM by the majority of respondents, the LME will continue to take into account the needs of the physical market, and the credit provision that DCVM allows. It is also worth noting the regulatory direction in this regard, and while DCVM remains a currently acceptable form of margining, it may be preferable (from a regulatory risk perspective) to undertake a move to RVM at some point in future. The LME is mindful of the need to ensure as far as possible that those clearing members and clients who would be most impacted by the change have the necessary information and time to allow for the change. The LME believes that where it is able to assist in reducing the impact, for example by the introduction of improved use of LME warrants as collateral, this would further assist those clearing members and clients in ameliorating the impact. It is notable that a number of clients and clearing members thought that the levels of segregation and the associated implications of DCVM needed further clarity.

- **4.D Should the LME offer a choice of VaR and SPAN methodology, stay with SPAN or transition to VaR?**

The view of the majority of respondents was that a move to a VaR methodology that reflected the characteristics of the LME market was desirable. Broadly, even those who were supportive of the simplicity of SPAN acknowledged that the potentially lower initial margin offered by a VaR model would be of benefit to the market as a whole. There was only one response that argued in favour of the LME offering a choice of model; many respondents argued against a choice on the basis of complexity for clients, particularly those who have multiple clearing accounts at different clearing members.

The LME has been engaged with the clearing member Risk Working Group for some time on the design of a VaR model that is appropriate to the products traded and cleared by the LME and it is clear that there is significant support for such a move in order to improve the efficiency of the initial margin process. There were only a very small number of respondents who wished to retain SPAN and very little support for having a choice of model.

- **4.E If you consider that the LME should move to a VaR methodology, how quickly do you think this transition should happen?**

Many respondents noted that the move to a VaR methodology was complex and would involve significant changes to clearing members, clients and back office vendors. There was much interest in the type of VaR methodology that the LME would propose and participants encouraged the LME to ensure strong engagement with the market and transparency over the methodology to ensure that clearing members and clients were able to both understand and predict the levels of initial margin that would result. Many clients also encouraged LME to provide tools to enable reconciliation and replication of the VaR methodology.

There were no specific views on the overall transition timeline other than to note the regulatory approval process and to ensure that sufficient market engagement was undertaken to allow for the necessary IT and operational changes and risk analysis by clearing member and their clients.

The LME recognises that a change to VaR will impact throughout the ecosystem of the LME market and that clearing members, clients and ISVs need time to assess the changes, understand and be comfortable with the risk management and collateral implications, and plan for the changes to their technology and business processes. This is something on which the LME will continue to engage with the market with a view to confirming a timescale for implementation.

- **4.F Should the LME provide an additional GROSA account for direct client activity alongside its current offering of NOSA and ISA?**

The feedback on GROSA for direct clients was positive with only a handful of responses arguing that this was unnecessary. Overall the ability to choose the level of segregation available was seen as a positive by many clearing members, and in particular clients, with several arguing in favour of GROSA as a cheaper alternative to an ISA to remove the customer comingling for DCVM flows.

Several clearing members noted that the availability of GROSA utilising a one-day liquidation period was permitted under US / EU equivalence and that this should be something that LME offered. Some respondents also requested that an affiliate OSA was available to enable client business to be kept separate from third-party clients.

Taking into account this broad support, the LME believes it is prudent to investigate making the GROSA account structure available for direct client activity, particularly if it is possible to utilise a one-day liquidation period, although the LME notes this may require significant investment, as this would result in different types of clearing accounts having different initial margin levels applied.

- **4.G Should the LME offer an additional booking model in addition to the current T4 model for agency style business that would enable members to book certain types of client business directly to the client account?**

The responses to this question were largely covered in question 3.A. On balance most responses supported an optional T2 booking model for agency style business, while preserving the current T4 model for that business which benefits from its flexibility.

- **4.H Should the LME offer additional clearing flexibility to enable members to book "futurised exchange contract" types of business to client accounts that are currently not traded on the LME's trading systems, including additional currencies and further**

types of average contracts, such as balance-of-month contracts and cash-settled non-standard contract sizes?

There was significant feedback on many elements of the additional clearing flexibility; in general there was no demand for additional currencies, with clearing members and clients preferring additional flexibility around averaging contracts. Most market participants expressed a desire for flexibility to average across any date range for the existing metal contracts with the ability to "futurise" these by bringing them into clearing as LME contracts. Many respondents noted that the trading behaviours of many clients, most notably physical clients, in some jurisdictions has led to OTC averaging in both USD and other LME currencies to continue to increase and that these cannot currently be brought onto the LME.

- **4.I Should the LME offer an additional OTC clearing service, in addition to the current exchange contracts, to enable members to offer clearing of OTC contracts that reference LME prices, but are executed under different contractual terms?**

The majority of respondents to this question were of the view that flexibility in being able to book contracts referencing LME prices should be as extensive as possible allowing for either OTC clearing or "futurisation". Many respondents noted the regulatory differences between OTC clearing and exchange traded products and in particular the capital treatment and margining approaches. The demand for OTC was, however, very mixed with many respondents noting that the ability to book cash settled LME "look-a-likes" would be useful, with others stating that the rationale for cash settled contracts was to avoid the costs of LME contracts and clearing. There were only a very small number of market participants who argued against further flexibility and in particular OTC clearing and / or "futurisation" offerings.

Some of the larger participants noted that the continued push for clearing and the regulatory capital requirements, particularly in Europe, for OTC uncleared contracts and in particular the requirement for bilateral initial margin would continue to increase the costs of OTC uncleared both financially and operationally which would increase the attractiveness of both OTC clearing and "futurisation". Many participants also noted that exemption for hedging activity is expected to be maintained and that many of the smaller physical clients would not need to exchange bilateral initial margin and would likely remain users of OTC contracts.

There was significant feedback that LME should continue to offer more flexibility on averaging products in particular, and that this should build on the recently launched enhanced averaging to provide for additional date ranges within the existing suite of metal products. Many respondents noted that further products with different underlying metals were desirable and would be complementary to the current base metals products. There was also in general support for more flexibility in the OTC space where capital requirements in particular are expected to significantly increase the costs of bilateral uncleared OTC. However, many respondents noted that OTC metals markets would continue and that LME should also investigate OTC solutions that assisted clearing members and clients with their capital and operational requirements, particularly and as new legislation, especially OTC bilateral margining, is implemented.

The LME intends to continue to investigate offering OTC clearing solutions, noting that a completely flexible offering is the desired end-goal for the majority of participants.

- **4.J Should the LME offer additional pre-trade controls as a central utility to enable members to control client activity, including controls over positions and margin levels?**

The responses relating to pre-trade controls focussed on the orderbook activity undertaken by clearing members and their clients. While some responses were happy with the current pre-trade controls offered, overall, there was broad support for additional pre-trade controls that would provide protection for clearers, the LME and LME Clear against erroneous trading activity. Many respondents were of the view that, provided the use of pre-trade controls represented a level playing field and impacted all users equally, such additional controls would be welcome.

The LME will investigate what further pre-trade controls might be useful for clearers, and work with clearing members to implement those that are desired.

5. DELIVERY AND PHYSICAL MARKET STRUCTURE

SUMMARY

- **The LME's warehouse rules have addressed the issue of structural queues, but have also resulted in a more complex warehousing environment, in which stocks have left LME-licensed warehouses**
- **The LME has been urged to consider a number of issues post-warehouse reform, including operational queues, stock levels, the attractiveness of the LME network and possible simplification of its rules, although it is unclear whether this can be achieved without relaxing the protections available to users of the market**
- **There is simultaneously interest in whether the LME should expand its network of Good Delivery Locations, and the market should consider whether the addition of further delivery locations is positive for LME contracts**
- **As stocks have fallen, the ability of participants to accumulate significant positions has increased, and it may be appropriate to take further action to limit the exposure which any one party may hold**
- **The LME's warehousing network (through both LMEsword and LMEshield) also provides significant opportunities, especially in respect of collateral management and transformation solutions**

LME ANALYSIS

- **The LME considers that its warehouse reform programme has achieved its primary policy objectives, while accepting that there have been additional consequences, such as falling stocks. The LME believes that operational queues are not an outcome of reform, rather an element of normal logistical activity**
- **The LME would be pleased to consider both expanding its GDL network, and simplifying its warehouse rules. However, the LME's priority remains the maintenance of an orderly market, such that the value of warrants in its warehouse network is reflective of the "all-in" price of metal – a priority which demands both that GDLs meet LME regulations, and that warehouse rules adequately protect the market**
- **The LME considers that the existing Lending Rules, together with the daily reporting of positions and Accountability Levels regime, are effective means by which positions, including dominant long positions, can be managed and are consistent with the LME's regulatory obligations**
- **However, the LME is keen to understand whether there is any appetite for change to the current regime, particularly in light of the forthcoming introduction of FCA-determined position limits under MiFID II**
- **Any change must not result in the encouragement of inappropriate behaviour on the part of market participants and the LME further considers that changes must apply equally to all LME physically-delivered contracts**
- **The LME believes that the implementation of a DvP solution for LMEsword warrants and LMEshield receipts would significantly reduce intra-day exposures across the LME market and would enable greater liquidity and efficiency for metal holders**
- **The LME believes that the development of a commodity repo service for LMEsword warrants and LMEshield receipts could provide the opportunity for commodity owners**

to maximise the liquidity of their asset holdings

DISCUSSION QUESTIONS

- **5.A Do you agree with the LME's overall assessment of its warehouse reform programme, including its position on operational queues?**

A significant majority of those who responded to this question did so in the affirmative. In general, there was broad support for the LME's warehouse reform programme and its ongoing success in reducing both queues and the discrepancy between the LME price and the "real world" price of metal. Those in favour felt that operational queues are a normal part of business, or that they were less concerned with the detail of reform than the efficiency of the network as a whole which was viewed to be much better, or at least improving.

Despite this, there were some concerns that the process took too long, might have gone too far, and that further unintended consequences (positive or negative) may still materialise making it difficult to provide a fully accurate assessment in the immediate term. As an example, while the reform programme has been successful, it was highlighted that it has also led to high levels of warehouse delistings, a trend not considered to be a result solely of market cycles or high headline rates (given that warehouses offer discounts), but because the LME warehouse network is no longer as attractive, meaning that users are more likely to look for alternatives, which is leaving the market more prone to backwardation.

Although this was a relatively small group, there was greater consensus from those respondents commenting on the complexity of the warehouse reform programme which, amongst other things, was felt to have increased the difficulty of anticipating costs, raised the barriers to entry, and ultimately, made the network less appealing.

These comments were part of a broader concern that the most significant negative consequence of the warehouse reform programme has been lower warehouse stocks and a concomitant loss of transparency for the market. It was argued that this has been too high a price to pay in respect of both transparency and spread tightness, that a no-queue environment is not more important than effective and efficient functioning, and that resulting lower stocks will have the same negative impact on cash and physical price convergence as queues. It was also suggested by some respondents that the LME is not neutral in respect of encouraging – or discouraging – stocks onto warrant, but that it is both imbalanced in favour of consumers, and has actively encouraged metal to leave the system, subsequently threatening price discovery and orderly market functioning. There was also concern that the network will not be able to (or want to) respond to another global financial crisis the way it did in 2008.

In contrast, others pointed out that any additional consequences would not be the result of reform alone, but also the consequence of lower LME volumes, increased fees, and a lack of willingness from traders to put metal on warrant (noting that the network has the capacity to take in more). They believed that, if the LME focused on the needs of traders, this would bring back volumes which would, in turn, increase stock levels.

The LME is pleased that so many of the Discussion Paper respondents agreed with its assessment of the warehouse reform programme. That said, the LME is also cognisant that the reform programme has had additional consequences, some of which may be considered by certain stakeholders to be less beneficial for the market, many of which were anticipated. The LME would point to the Discussion Paper itself for the LME's assessment of these concerns.

That said, the LME also agrees with those respondents who point out that LME warehouses are, for the most part, willing and able to warrant more metal and has no concerns that the network would not respond to significant market need should that situation arise. The LME's understanding is that there is a fine balance between market fundamentals, stocks and trading activity and that its role is to provide a system which operates effectively and fairly for all user groups. The LME remains committed to both promoting trading activity and providing an efficient warehousing system available for all stakeholders. It has not favoured one group, or market practice, over another in the process of its warehouse reform programme.

From a more functional perspective, some respondents were concerned with the LME's distinction between operational and structural queues with one arguing that this is unhelpful given that there is no corresponding distinction for the financial impact on the metal owner. They argued that all queues are bad (and encouraged by reform as warehouse operators moved metal off-exchange). Furthermore, while acknowledging that queues can occur following significant cancellations, some respondents suggested that the LME needs to ensure it has the appropriate regulations in place to stop "operational" queues being abused. The opinion was given that operators should be obliged to report their queues (which is, in fact, already the case with queues reported monthly on a per-warehouse per-location basis on the LME website) and, elsewhere it was requested that this report be published on a daily basis. Further, some respondents also requested that cancelled stocks should be scheduled for load-out rather than allowing ambiguity with cancelled stock being able to remain indefinitely in the warehouse.

The LME fully recognises the concerns around operational queues but would argue that some definition of "acceptable" queues is essential given that it will never be feasible for large cancellations to be loaded out immediately and that it would be unfair to penalise warehouse companies – who have no control over cancellations – in such circumstances. The LME agrees that it needs to maintain rigorous oversight over such queues and provide the queues reports to ensure that the market also has full transparency over developments in the LME physical network.

Further concerns around transparency and rules included that the LME should raise the insurance requirements and encourage whistleblowing on fraud by providing rewards. The need for the LME to maintain a high level of market scrutiny was repeated by a number of respondents. This included a need to guard against systemic collapse caused by fraud and bankruptcy (and the resulting loss of credibility), maintain regular and stringent audit and reviews and highly active policing to ensure all parties comply with LME obligations, operational best practice (including security and confidentiality from parent company) and prevent exposure of warehouse companies to metals trading. More transparency of the LME Physical Operations department and audit results were also requested, including the legal criteria for Good Delivery Locations ("GDLs") which it was felt would help with risk management.

As a final point, the LME also received a request for all the warehouse notices to be incorporated into the LME rulebook.

The LME is very grateful for all suggestions in respect of operational efficiency and is in agreement that it needs to maintain full oversight over the network at all times. The LME will work with its key stakeholders and committees – including in particular the Warehousing and Physical Market

Committees – to undertake a full assessment of these suggestions and any resulting amendments will be communicated to the market in due course, and may be subject to consultation and regulatory approval.

- **5.B Do you think the LME should pursue rule simplification and if so, what do you think represents the optimal balance between market protection and simplification? Alternatively, do you think that some rules should be further strengthened?**

In general, the support was fairly evenly balanced between stability and continuity vs. simplification.

Broadly, those in favour of stability did not support strengthening the rules. In fact, very few respondents argued in favour of any increase in the severity of existing rules. The exception was a request for the LME to “raise the impact” of load-in, load-out (LILO) rules.

For those in favour of simplification, the most significant concern was that any such simplification should not mean that rules lose their existing effectiveness – as per the answers to question 5.A, the warehouse reform programme was largely evaluated as a success and market participants did not want a return to significant warehouse queues. On the same theme, there was a second order concern about the level of change which the LME system has absorbed during the reform process, and so a number of respondents, while broadly in favour of simplification and its potential benefits, would prefer to wait rather than enter into further reform.

However, those in favour of simplification argued that the LME reform has meant that the network no longer reflects market conditions (for example, no general contango, despite the supportive fundamentals), that it has led to a loss of metal and that the rules need to be amended in order to re-incentivise the use of LME warehousing, leading to higher stocks and concomitant higher volumes.

For those in favour of simplification, the most significant issue was that the existing rules are overly complex – these concerns are fully explored in respect of question 5.A above. To address this, a number of respondents requested the cancellation of specific existing rules, in particular either LILO or the queue-based rent cap (QBRC), or both. In fact, several respondents in particular focused on QBRC as a market disruptor, arguing that it makes warehouses reluctant to accept metal; that it, in effect, penalises warehouse companies; that the certainty provided is not a fair exchange for the metal loss; and that anything which creates non-market driven incentives to cancel metal is detrimental to price discovery. In contrast, elsewhere it was argued that the claim that QBRC disincentives warehouses from taking metal on-warrant is unsubstantiated and that, not only will warehouse operators accept the risks, but they are also willing to pay incentives for that metal.

An alternative suggestion was that the LME cancel LILO or QBRC or both, but retains the ability to bring either back immediately should queues emerge; another was that the LME “soften” QBRC by increasing the time period for full rent payable to reduce the risk of manipulative cancellations.

The LME recognises that an impact of warehouse reform was a loss of stock from the network; indeed, this has been explored in a number of previous LME reports. The LME is sympathetic to calls for reform but, equally, is also sympathetic to those who argue that the efficiency and orderliness of the market has to be prioritised and as a result, does not prioritise the transparency created by warranted stocks over stability. The LME believes that any environment in which the LME retained the ability to amend the rules at short notice would create uncertainty which would ultimately be unhelpful to the market, making it difficult for any market participant, including warehouses, to plan effectively and create realistic or dependable business models.

Taking account of the broad, and largely balanced, feedback on this topic, and with calls for stability in mind, the LME is not proposing any amendment to its warehouse reform at this time, but will continue to assess and review its physical network in order to ensure that it operates in a fair and orderly manner and continues to represent the needs of the industry.

The LME also received a number of comments, which, although not specific to the warehouse reform programme, do raise some interesting questions with regards to its network as a whole. For example, a concern shared across of a range of participants was in respect of high headline rates for LME warehouses. It was argued that this makes the network inefficient, prevents competition between warehouse companies and deters use, forcing metal off-warrant until such time as strictly necessary. These rates were considered particularly negative in comparison to off-warrant costs, and this delta was thought to be unlikely to reduce despite the five year rate freeze currently in place, meaning that the risk remains that the LME price distorts from the real world price of metal and potentially prompts a return to high premium prices. One method cited to prevent such an occurrence was transitioning to an FOT contract – the LME would point those interested in this option to its Discussion Paper on warehousing charges published in July 2016 – the result of which can be found in Notice 16/320 : A314 : W098. More broadly, the LME is interested in the role of headline rents in the perceived attractiveness (or otherwise) of the LME network and is working with its warehousing companies to assess what the potential options might be in this area.

On a similar theme, a number of respondents commented on incentives paid by warehouse companies, with a broadly even split between those who would like such incentives banned and those who would prefer the LME to leave the rules in the current formulation. Those against incentives consider them to be distortive, creating financially driven (rather than consumer driven) cancellations, creating a loss of transparency and subject to unclear rules from the LME in terms of monitoring. It was argued that rent deals should only be permissible for metal owners who retain an ongoing financial interest in the metal in question.

On the other side, respondents argued that reducing headline rates would lead to lower incentives (not vice versa), and that a restriction of incentives themselves would reduce the competitiveness of LME warehouses and make the network less attractive to metal owners. It was argued that it would also advantage parent-owned operators who could use broader balance sheets to offer different forms of permissible incentives which would not be available to independent operators. The LME itself has been concerned about the use of incentives in its market in the past, and it is this concern that led to the introduction of the rules around incentive reporting. As such, the LME is satisfied that, generally, the incentives paid in its market are not distortive. That said, the LME is also aware that the use of incentives evolves over time and is fully committed to ongoing engagement with relevant stakeholders to ensure that these rules remain sufficient to monitor and protect the market as necessary. Any market participant unclear on the incentive reporting rule specifically is asked to contact the LME Physical Operations department.

The LME also received a number of suggestions as to other potential operational changes and efficiency improvements, including that the LME adopt a load-out requirement used by other exchanges where a percentage of stock is required to be delivered out daily, that load out should be on a per-shed not a per-warehouse company basis, that warehouses looking to start up in new locations should compete for licences on cost, or that load-in and load-out costs should be shared equally by the buyer and seller of metal. Further suggestions included that the LME relax some operational rules (for example, the allowed distance between the road and water) to encourage use of the LME system and the development of inland locations. Other requests included: clarity on when a warehouse can refuse to accept metal onto warrant; metal tracking to accurately distinguish between new metal and rewarranted metal to add transparency and make fundamentals easier to ascertain; fungibility of metal through the standardisation of purity requirements; and notification to the LME of which metal is financed to provide the LME with better oversight of market arrangements which may impact stock levels. It was requested that the LME provide a customer service function to deal with complaints (the LME would point out that it already has a clearly defined complaints process and would ask those concerned to contact the Physical Operations department directly).

Although most of these were individual requests, there was slightly more support for changes to rules relating to load-out. A small number of respondents were in favour of an extension to the load-out definition to include any LME warehouse in the same location, arguing that this would disincentivise de-stocking between warehouse companies, considered to reduce the amount of metal in circulation (as metal is subsequently tied up in rent deals) and thus negatively impact stock availability.

Another such request was that the LME should relax its load-out rules to allow for the delivery of metal from LME warehouses to those of another exchange in the same GDL – a practice that is not permitted under the current rules. Although there was acknowledgement of the LME's concern that this would facilitate "merry-go-round" trading where metal is just moved from one warehouse to another, they argued that this would not be the case, given that QBRC disincentivises building up high levels of stock in one location. Further, it was argued that this rule limits the arbitrage opportunities for traders, that it is illogical and disruptive and prevents convergence between futures markets and physical markets. In the absence of any change to this rule, it was requested that the LME instead allow the storage of LME warrants, and warrants of another exchange to be stored in the same shed.

One area of interest was for the LME to promote the physical convergence mechanism implicit in its price discovery as this represents a key point of difference with other exchanges, and this remains the central focus of the Exchange's approach to its operational rules in respect of its physical network. Given that these issues fall out of the scope of the Discussion Paper, it is not proposed that these are analysed in depth here. Rather, the LME will use the suggested improvements received as part of the Discussion Paper process as the start of a full and detailed analysis of the operational processes as outlined by the LME's rules and procedure and any efficiencies which could be provided to the market as a result. As per question 5.A, this will be undertaken in collaboration with key stakeholders – any resulting amendments will be communicated to the market in due course, and may be subject to consultation and regulatory approval.

- **5.C Are there locations which you believe the LME should assess as potential GDLs, and would you like to see an expansion of the GDL network?**

Of those who responded to this question, the majority were in favour of an expansion to the LME GDL network arguing that this would improve competition, reduce costs and help in terms of creating a global balance of supply and demand. Other respondents cited their discomfort with a model where only a few warehouses are able to dominate, and felt that a wider global footprint would help address this.

As such, a number of potential new good delivery locations were cited with China, India and Central / South America (specifically, Brazil and Mexico, with Chile and Peru also mentioned) most commonly referenced as the most interesting potential locations. New US locations, Russia, Africa, Bangladesh, South East Asia (especially Vietnam), Hong Kong and Turkey were all also referenced.

There were a number of suggestions for amendments to existing locations, such as reconsidering whether some areas should still be classified as net production or consumption, particularly in relation to specific metals (such as South Korea for lead), and whether net production areas should still be considered as such given the trend – for example in aluminium – for producers to move into value add products meaning that the production of LME-deliverable shapes is reduced. Equally, it was pointed out that price discovery needs to reflect supply and demand and that, given many producers (especially in Mumbai and Sao Paulo) are now exporting their own material and importing material for their own use, they might not be considered as net producing areas. Suggestions for delistings were also received, with certain ports being cited specifically as unsuccessful GDLs with no natural metal flow.

Although most respondents were in favour of expansion, the majority of these also stressed the need for the LME to retain its exacting standards in its assessment of potential new locations, and that these should not be relaxed for the sake of adding new locations. Specific risks cited included safety, inconsistent law and regulation, political risk, transparency, and a lack of appropriate free trade facilities. A number caveated any approval with requests that any expansion should be discussed in detail with the physical market first.

More broadly, some respondents pointed out that locations should be approved in strategic locations such as ports with a natural uptake of metal or endorsed by a broad range of market stakeholders. New locations could add value by filling a geographical gap or increasing capacity but should only do so after consideration of the existing options. Careful thought would also need to be given to the charge caps set for new locations by the LME given the risk of creating structural competitive disadvantages if this were not assessed appropriately. It was suggested that the LME could be more proactive in working with governments to point out the benefits of becoming a good delivery location and assist with the necessary regulation.

A small minority of respondents were not in favour of expansion, with a higher number taking a more moderate, but cautious, position pointing out that there does not appear to be real need at the moment or that further locations could split liquidity. In general it was recommended that the LME consider new locations on a case by case basis, even when applications are submitted in regions with no current warehousing infrastructure. As an addendum to this point, a caveat from those less in favour of expansion in the current climate was that their position would change if a new area of net consumption emerged or trade patterns shifted.

The LME is largely in agreement with many of the recommendations as outlined above. It would always remain open to new applications, but would not prioritise adding locations at the expense of the appropriate legal and regulatory environment, or where a location was in danger of providing a less efficient or sub-standard service to owners of LME warrants. Ultimately, as a global network, the LME must have regard to the importance of parity across good delivery points, or risk creating a price distortion. As such, the LME welcomes new applications and it is ready to assist as appropriate in the listing process, while remaining fully committed to a realistic and exacting case-by-case analysis conducted with the full collaboration of the broader market as necessary.

- **5.D Do you agree that the Lending Rules are well understood and accepted by market participants, and that they provide appropriate protection against the potential impact of lower stock levels?**

A significant majority of respondents agreed that the Lending Rules are understood by the market, reporting that they are robust and practical, and enable the LME to run an orderly market and ensure liquidity. Further respondents commented that the Rules have “stood the test of time”, are innovative and have been endorsed through practical application.

Of these, very few commented specifically on the protection the Lending Rules offer against the impact of lower stocks but those who did felt that lower stocks would increase the risks associated with dominant positions, increasing the likelihood that a market player is able to build such a position, inadvertently or otherwise. Although most respondents believed that the current rules are constructed to resolve any issues in low stock scenarios, some recommended excluding financed metal or metal which is not available for immediate delivery from the calculation so that this is based solely on total available stock. The LME is cognisant that a number of market participants hold this view and, although recognising the underlying logic, does not believe it is necessary to identify and exclude warrants subject to financing deals from the calculations. The LME, and the Physical Market Committee, examined this question in some detail as part of the 2014 logistical review (see Notice 15/161 : A157 : W051), and concluded then, as it does now, that even warrants subject to financing deals would be released from such deals and made available for settlement should market conditions justify such a move. As such, the LME is not proposing a change at this time.

Only a few respondents recommended strengthening the Lending Rules, but did not provide recommendations as methods to achieve this aim. A small number of respondents specifically recommended leaving the Lending Rules in their current incarnation.

Several respondents felt that the Lending Rules are not well understood by the market, and it was commented that a position limits regime would be more appropriate given that the current method is, in their view, opaque and vulnerable to excessive backwardation in a high price environment. It was further commented that the warrant holding report is too delayed and backward looking. The LME’s response to this is dealt with in question 5.F. In contrast, those respondents who agreed that the Lending Rules are not well understood by the market felt that the LME’s own understanding compensated adequately, that this was sufficient, and that the rules are effective regardless. A very small number of respondents felt that the Lending Rules are understood by LME members in great depth, but that this is not replicated across the broader market.

It was also highlighted by a minority that they did not think that the Lending Rules are fit for purpose – that they make it too easy to build a dominant position and are not appropriate for ongoing use. Again, the LME’s response to this is dealt with in question 5.F.

- **5.E Do you consider that the inclusion of positions held on further-listed prompt dates would be appropriate when determining whether a position is dominant or not?**

Of those who responded, the majority did not feel that including positions on further listed prompt dates would be helpful (unless required by incoming regulation). There were a number of reasons stated, including that further forward positions were more likely to be *bona fide* hedges; that despite best intentions, this would be difficult to police given that members could bypass any controls on lending by holding positions on non-restricted dates; and that potential dominance was most relevant on nearby dates given the need for available metal at that point. This aside, further detail in the futures banding report was felt to be helpful.

Some respondents did feel that amendments could be made, although the LME was cautioned to undertake a cost / benefit analysis before making alterations to rules that were felt to be well understood and functioning appropriately. Similarly, of those respondents who commented that this would be interesting to explore, almost all commented that they would like to see the proposed changes in calculation thresholds and / or stock levels before committing further. However, it was noted that further work could address concerns about excluded prompt dates and could act as protection for both short and long positions.

Despite this, however, a number of respondents were interested in including further-listed prompt dates, and some argued that this could be staggered so that there were tighter limits at the front end of the curve, with larger limits permitted further out. Again, respondents here would prefer to see the logic behind any proposed change before committing, and would also like to understand if any offsets would be allowed for physical hedging vs. speculation. Other participants felt that this could facilitate the LME in avoiding dominant positions reoccurring, and would mean that highly active participants at the front end would be less able to use the market knowledge gained from this activity to take advantage of future price movements.

The LME recognises that while there may be benefits to the market as a whole through the inclusion of positions held on further-listed prompt dates, it is also mindful of the fact that making changes to the existing arrangements requires careful study prior to proposing any change. Therefore, the LME will not only continue to keep the current arrangements under review, but will also explore further the possibility of extending the scope of them.

- **5.F Do you consider that the current Lending Rules threshold limits (both percentages and premium level) are appropriate?**

Again, most respondents to this question felt that the current threshold limits are appropriate, with some specifying that either the percentages or premium levels are particularly appropriate. It was recommended that the LME maintain an ongoing review, taking the advice of experts as required and ensuring that any dominant positions are fully investigated, especially those which reoccur.

It was requested that members are notified when one of their positions is close to becoming dominant, rather than once the threshold is reached. The LME understands the logic behind this request, but given that the arrangements are considered by many market participants to be well understood, would suggest that position-holders themselves are able to develop mechanisms for alerting in the event that a position(s) is close to becoming dominant. Indeed, under the forthcoming position limit regime that will be implemented as part of MiFID II in January 2018, the LME would expect members to have in place their own position monitoring arrangements, which could be adapted to provide precisely the type of notification referred to above.

Of those who were in favour of strengthening the Rules, the majority of comments were in respect of the stock levels; specifically, that amendments could be made to reflect times of lower stock levels. These questions are fully explored in respect of question 5.D above.

Some respondents did not feel that the thresholds are appropriate and should be reviewed, with some reiterating their view from question 5.D that a position limits regime would be more appropriate given that the current method is, in their view, opaque and vulnerable to excessive backwardation in a high price environment. They further commented that the warrant holding report is too delayed and backward looking. The LME would point out that the implementation of a position limits regime is already underway given that this is a requirement under MiFID II.

On a similar topic, other respondents expressed an interest in how MiFID II, and position limits in particular, would affect the LME's Lending Rules. While MiFID II does introduce a position limit regime, there is still a requirement for trading venues (e.g. the LME) to have appropriate position management arrangements in place, and therefore the MiFID II position limits should be viewed as complementary to the Lending Rules.

Finally, it was felt by some respondents that the LME was too complacent in its confidence that only minimal stocks are required to ensure settlement, leaving position limits to the FCA to determine. Such respondents would prefer that position limits be relevant at contract inception so that short positions cannot be "held hostage" by long positions and to make building up dominant positions more difficult; otherwise, they felt that the LME would run the risk of losing the support of the physical market, closely followed by the financial market. The LME fully understands this view; indeed, the Exchange has been working with the FCA to define a position limits regime which adequately reflects the nuances of the LME market. That said, as with all regulation, the final decision is for the regulator alone. The LME, while recognising that dominant positions do occur, does not feel that the current model facilitates such activity and is proactive and engaged with the market when this does happen. It is also worth noting that MiFID II allows for a blanket position limit of 2,500 lots to be set for all new contracts until such time as the open interest exceeds 10,000 lots.

- **5.G Do you agree that the LME should develop a DvP solution for LMEsword warrants and LMEshield receipts?**

This question was only responded to by a relatively limited number of participants. Of those that did opine, in general, feedback suggested that the market would in principle benefit from a DvP solution for transactions involving LMEsword warrants and LMEshield receipts. Many respondents did not give a specific opinion on whether the LME should develop a solution, but requested further information about the specific details and scope of the proposed DvP solution.

Several respondents highlighted that a DvP solution would facilitate ex-cleared transfers of warrants by removing or reducing the need for counterparties to have large intra-day credit or settlement limits.

On the other hand, some participants were content with their current settlement procedures, and thought that it was not necessary for the LME to develop such a solution.

While the LME does understand that many of those trading have got comfortable with existing solutions, it does think it would be beneficial to provide a DvP solution for the market, as this may allow some companies with lower credit ratings more easy access to the LME physical infrastructure, and make it easier for members to trade with such firms.

The LME intends to investigate a DvP solution, and work with market stakeholders to determine the specific functionality.

- **5.H Do you agree that the LME should explore the development of a commodity repo service for LMEsword warrants and LMEshield receipts, modelled on the existing repo market for securities?**

The general feedback on the idea of a commodity repo service was mixed, with respondents requesting further information on exactly what the LME was proposing before they could give an opinion.

Some respondents thought it would be interesting for the LME to start exploring this area and expanding further into the physical trading value chain – especially if it provided additional compliance monitoring and price transparency. Other respondents highlighted that there is already an active repo market in LME warrants that is facilitated by members and other financing entities, and suggested that this market is adequately supported by the existing market infrastructure (with the potential addition of a DvP solution as per question 5.G).

Other respondents believed that the metals repo financing market would be difficult to capture within a centralised solution given the large variability of the OTC financing market and the non-fungible nature of LME warrants and receipts.

While the LME remains of the view that it would be an interesting market development to provide some centralisation of the existing commodity repo market, it does note that the complexity required means this will likely be a longer term project.

6. MEMBERSHIP

SUMMARY

- **Members sit at the core of the LME's ecosystem, and the LME believes that its membership structure serves its market well**
- **Residual challenges include (i) accommodating regulatory change and demand from entities wishing to undertake and clear group business, and (ii) reacting to demand from entities wishing to self-clear and provide execution-only services to clients**
- **The LME's category 4 membership structure has been revised recently, although the value of the category 4 proposition to the proprietary trading community remains limited**
- **The LME is committed to the role of B shares in its membership structure**
- **The role of Introducing Brokers is becoming increasingly significant, especially as the LME moves into the ferrous space and looks to grow its options offering**

LME ANALYSIS

- **The LME believes that its membership structure serves its market well, but would benefit from further enhancement in order to accommodate a broader range of participants and grow the membership**
- **Introducing an affiliate account to all clearing memberships will allow affiliate business to be booked to a separate OSA / ISA affording a differential fee to be applied to those trades, and allow ICMs to undertake group business without having to become a GCM**
- **Permitting category 3 members to additionally execute and give-up trades for clients will allow for wider participation in LME membership**
- **The LME's commitment to its B shareholders remains steadfast, and the LME is prepared to invest in further facilities to enhance access to B shares, allowing holders of excess B shares to dispose of these, while making LME membership more straightforward for potential candidates and further increasing demand for B shares**
- **Optimisations to the category 4 proprietary trader structure, and an enhanced role for Introducing Brokers, will, in the view of the LME, enhance volume, and hence revenue streams for the membership through whom such trades would be executed and cleared**

DISCUSSION QUESTIONS

- **6.A Do you agree that the LME's membership structure provides broadly the correct interface between the LME and its underlying market?**

Most responses broadly agreed that the LME's current membership structure provides the correct interface between the LME and its underlying market. The structure seems to be relatively well understood. Members primarily agreed that the current structure is appropriate and efficient even though it was highlighted by some that the significance of LME membership has dissipated over the years.

Some categories of members disagreed with the characteristics and advantages of other categories. For example, some category 2 members felt that the current market structure is too advantageous for category 1 members. Other respondents desired that more attention is given to category 1 member needs, to increase the attractiveness of the category. Several members felt that the investment they have made in the market, and the services they provide (particularly client clearing) should mean that they are given preferential fee levels.

On the other hand some respondents questioned the current structure feeling that it was too complicated, and only really beneficial to those firms wanting to clear trades. Several respondents suggested a more common model of General Clearing Member (“GCM”) / Individual Clearing Member (“ICM”) / Non-Clearing Member (”NCM”) categorisation would encourage greater membership uptake, potentially with a separate addition for Ring trading.

Non-member responses were generally less supportive of the current structure. It was expressed that the current structure benefits current members but that it is too restrictive for new participants. In conjunction with the suggestion of a GCM / ICM / NCM model as above, specifically it was highlighted that there is no advantage to becoming a non-clearing member (proprietary category 4) on the LME as this does not give a trading fee discount. In line with this, some respondents felt that all members should have access to the lowest level of trading fees, without having to become a clearer and that the lack of access to this lowest level of fees was a significant deterrent to trading on the LME currently to some firms, leading to an increase in business moving OTC, and to other exchanges.

The LME considers that the current membership structure is fit for purpose and is encouraged by the range of different business models utilised by LME members. The LME entirely understands the desire for a non-clearing membership level which gives access to lower fees, which is further discussed in question 6.D below.

- **6.B Do you agree with the LME’s proposal to introduce an affiliate account for all clearing memberships such that a differential affiliate client fee can be applied and ICMs can undertake group business without having to become GCMs – thus introducing more flexibility into the membership structure?**

Most responses that commented on this option were very supportive, pointing out that it is relatively common on other markets.

Respondents welcomed the option to set up an affiliate OSA account with lower fees but that the exact fee levels would be decisive in the success of this alternative, some suggested that affiliate fees should be the same as member fees. It was also highlighted that the cost savings of the lower fees would be weighed against the additional funding costs arising from losing the netting benefits of having just a single OSA.

Some respondents, however, did express doubts on whether this alternative would attract more customers or increase the trading volumes and suggested that it would add unnecessary complexity to the membership structure.

Additionally, some members did express concern about category 1 and 2 members losing some of the benefits and advantages of their exclusive membership.

Broadly the LME thinks that adding an affiliate membership structure giving access to reduced fees would be beneficial for the market, and encouraging of membership, however within the context of the changes desired this is not an immediate priority, but may be able to form part of a longer term restructure.

- **6.C Do you agree with the LME's proposal to enhance the category 3 membership category to allow for execution-only client business?**

While some members were not averse to this enhancement to the category 3 membership level and some felt that it may bring incremental client business at the margin, broadly most members were relatively strongly opposed. It was felt that this could fundamentally change the existing membership structure and undermine the category 1 and 2 membership levels and potential lead to some existing category 1 and 2 members deciding to instead become category 3 members, which would be negative for the LME as there would then be fewer members providing client clearing services.

There was some support for this enhancement if it could help inter-dealer brokers access LME markets more easily, though this area is addressed more directly in question 6.F.

Generally non-members did not have a strong view regarding category 3 members being able to execute client business. Where there were comments, some felt that it could bring new business to the Exchange, but others felt that it may impact the number of firms wanting to become category 1 or 2 members.

Taking account of the lack of strong support for this initiative, the LME believes this is not the correct time to pursue changing the category 3 membership structure.

- **6.D Do you agree with the LME's view that the category 4 proprietary trading model would need to enjoy a fee benefit (beyond fees paid by a standard client of a member) in order to gain traction?**

This question had some contrasting feedback from the various respondents. It is worth noting that there seemed to be some misconceptions around the fee levels currently paid by category 4 proprietary trading members, with some responses being strongly opposed to category 4 members paying a fee below that enjoyed by category 1 and 2 members, where in fact currently a category 4 member would pay a total of $2.70 per lot (the same as for a standard client of a member) for an outright trade, where a category 1, 2, or 3 member would pay $0.90 per lot for the same type of trade.

To this end, many member responses were opposed to any category of membership having a preferential fee over any other category, which led to opposition to the suggestion of a category 4 discount, though this discount would be necessary to bring category 4 membership fees in line with those paid by category 1, 2, and 3 members.

Some category 1 and 2 members felt that their commitment to the LME, and the services they provide to the market generally, mean that they should receive a lower level of fees than is available to other participants who do not provide these services.

As per the commentary on the LME's ecosystem, and the role of systematic financial traders (normally proprietary traders) within that, some members were generally opposed to proprietary traders' interaction in LME markets, feeling that the LME should primarily service the needs of the physical trading community, but certainly that proprietary traders should not be preferentially treated relative to any other segment of the ecosystem. As previously mentioned, the LME and the vast majority of respondents feel that the healthiest possible market includes a broad range of participants, which includes proprietary traders, though the LME absolutely believes that all participants should have entirely fair treatment.

Many non-member respondents were very supportive of giving a fee benefit to category 4 proprietary trading members to reduce the fee burden below that of a standard client, and several highlighted that in its current form, the proprietary category 4 membership is largely redundant as the lack of fee benefit gives no incentive to join. Several respondents indicated that they may be interested in becoming a category 4 member if this did bring a fee benefit, and that this would likely result in them trading greater volumes on the LME.

Considering these points, in the longer term the LME intends to explore a restructuring of the category 4 membership, to make trading for category 4 members more efficient; however, within the context of the fee changes possible, other areas have taken immediate priority, and the possibility of restructuring of category 4 membership fees will form part of a longer term analysis.

- **6.E Do you agree with the LME's proposal for (i) a facility for the sale and purchase of B shares, and (ii) a B share "leasing" facility?**

There was broad support from both member and non-member respondents for a facility for the sale and purchase of B shares. The generally expressed view was that giving prospective new members easier access to purchase their B share requirement will make the membership process less onerous thus increasing the potential interest in membership and ultimately increasing the value of B shares.

The LME agrees that a facility for the sale and purchase of B shares would be a positive offering to the market, and will serve to ease the application process for new members.

Within the context of supporting the concept of a B share trading facility, some respondents did highlight that additional transparency of B share pricing may cause a problem in some instances, such as where a small transaction takes place at a low price which may not be reflective of larger transactions. This may mean that B share owners have to take a mark-to-market revaluation of their shares. The LME recognises this concern and, within the exploration of sale and purchase facilities, will consider whether any steps can be taken to mitigate this risk.

Opinion on the subject of B share leasing was more disparate, with some respondents feeling that this could again help lower the barriers for membership and thus encourage greater participation on the LME, while potentially generating a return for holders of excess B shares. Other respondents were concerned that a new member choosing to lease B shares showed a lack of commitment to the market, and that a prospective new member who did not have the available capital to buy B shares may not be a positive addition to the LME's membership. There was also some concern that this may lead to greater "churn" of membership by those members who are leasing their B shares. The question was raised as to what might happen in a potential situation where a member is leasing B shares to make up their B share requirements, and that lease comes to an end while the member still has outstanding positions at the clearing house.

There was also some concern that, as B shares themselves currently generate no income, leases could become incredibly cheap as shareholders with excess shares will chose to lease them out for almost any incremental return, and that this could itself be detrimental to the value of B shares.

In light of the feedback received and the LME's desire to make it as easy as possible for new members to join the market, should they have the required credentials, the LME will look to implement a facility for the sale and purchase of B shares, and will further investigate the possibility of a form of B share leasing facility and how this might be implemented in a practical manner considering the concerns raised.

- **6.F Do you agree with the LME's proposal to enhance the role of Introducing Brokers in its market?**

The subject of Introducing Brokers brought a number of varying opinions from both member and non-member respondents.

There was some confusion between a traditional Introducing Broker model, and the inter-dealer broker model.

The traditional Introducing Broker ("IB") model is understood by the LME to be where the IB acts as a tied agent of a member, finding and introducing new clients to that member and assisting in closing transactions, they will often act in a particular geographical location where they have specific experience. This type of model exists in many markets, and generally sits entirely outside of the central market infrastructure, due to the IB effectively acting as a marketing and execution service for the member.

This concept of an Introducing Broker has existed for many years on the LME[2], though over the years this structural recognition has evolved to also be used by brokers operating a model more generally known as an inter-dealer broker on other markets, though now also referred to as Introducing Brokers on the LME.

The inter-dealer broker ("IDB") model is where an IDB has a number of clients, which will include both LME members and clients of members, and is looking to match up trades between any two parties. Often they will act as an expert in a specific market where they are then able to "find the other side" of a trade due to their understanding of client interest. As this business model was not the original intention of the LME's Introducing Broker rules, these IDBs are not particularly well provided for within the LME rules and infrastructure, and have at times found it particularly difficult to onboard new clients.

[2] Notice 00/385 : A378 : R012 dated 15 September 2000

Many respondents highlighted that the traditional Introducing Broker model already exists on the LME, and while they are supportive of initiatives that bring new business to the Exchange, they felt that the necessary relationship between an LME member and the Introducing Broker is best managed on an individual basis by each member for which the current LME Rules provide.

Turning to the inter-dealer brokerage model, hereafter using the LME terminology of Introducing Broker ("IB"), several respondents were supportive of efforts to make IB relationships more formal and efficient, specifically highlighting the benefit IBs provide in less liquid markets such as options markets, or ferrous metals.

Similarly, several non-member respondents believed that it was important that it was made more efficient for IBs to interact on LME markets. Some respondents opined IBs bring efficiency to pricing in a market, and it is important that LME members do not impede their access.

Some member respondents were concerned that recognising IBs formally, and providing them access to trade on the LME, might undermine the existing membership structure, effectively giving a "back door" to trading on the LME. Similarly, some respondents were concerned that if the rights of IBs on LME markets are too favourable, it may result in the loss of some category 2 members to become IBs.

The LME has taken into account these views, both that IBs can add significant liquidity to lower velocity markets, and that any formal recognition of IBs must not undermine the existing membership structure, and believes that the correct approach is to offer tools to allow IBs to more efficiently interact on LME markets, but that this must formally bring IBs within the LME membership structure, and thus bind them to the rules. It should also be specifically recognised that an IB may only "match-up" business at a single price and thus benefit from explicit commission charged to their clients, rather than acting as a market maker benefiting from capturing bid-offer spread.

7. VOLUMES, COMPETITION, FEE STRUCTURES AND GROWTH

SUMMARY

- **Recent volume trends on the LME have been negative, driven by a combination of lower warehouse stocks, reduced volatility, depressed fund allocation to the commodity sector and increased fees**
- **While fees are ultimately a commercial matter for the LME (subject to the requirements of applicable law or regulation), it is appropriate for this Discussion Paper to consider whether the LME's fee structures incentivise behaviour which is beneficial to the market. In a number of respects, the LME believes that changes to the relative levels of fees may be appropriate, in order to maintain a level playing field for all LME participants**
- **The LME is comfortable with the use of its pricing and delivery infrastructure for OTC activities by its members. However, such comfort would not extend to the use of its facilities for trades executed on competitor platforms (subject to the requirements of applicable law or regulation)**
- **The LME undertakes an in-depth process for the analysis of new products, including extensive market engagement. It maintains a continual review of both the LME's existing product suite, and potential new products (a number of which are currently under consideration) to ensure contracts offer genuine value to the markets they serve**

LME ANALYSIS

- **LME volumes, while impacted by a number of factors, have undoubtedly been affected by higher fees**
- **Arguably more important than the absolute level of fees are their relative distribution (in particular, between outrights and carries, exchange and client contracts, and the LME's various trading venues)**
- **The LME believes that a combined trading and clearing fee reflects the in-house nature of the LME clearing house, and will enable members and clients to calculate and reconcile LME fees more easily**
- **The LME remains committed to ensuring that its product suite works for the market – adjusting and enhancing products to maintain their relevance**
- **New products are put through a rigorous process to ensure they reflect a market need, including extensive market engagement, and the LME is currently reviewing a number of options for new products**

DISCUSSION QUESTIONS

- **7.A Do you agree with the LME's analysis of the drivers of its volume performance?**

The majority of responses were in broad agreement that the LME has correctly identified the drivers of its volume performance.

Many responses highlighted several different factors which have all contributed to declining volumes on LME markets such as the decrease of warehouse stocks, the general increase in costs resulting from regulatory changes, and associated increases in capital charges, which have also led to several large bank trading desks exiting from base metals, or commodities generally. Hedge fund allocations to commodities have also reduced as lower volatility and a lack of longer term trends have reduced apparent investment opportunities in the sector.

While there were many factors that respondents felt had contributed to lower volumes, there was also a clear consensus that exchange fees have had a significant impact, both by generally making trading more expensive, but also by making certain business models less viable, particularly those that rely on trading many smaller carry trades which has historically been a large part of running an LME trading business. The high cost to trade carries was also highlighted by several client respondents as a factor that has reduced their ability to trade LME markets.

It is also worth noting, however, that several non-member responses did highlight that their experience was that it was not specifically the level of LME fees that were the problem, but that the overall cost to trade LME contracts was significantly higher than similar contracts on peer exchanges, due to the structure of LME markets, meaning that many trades have to be done to get into a desired position, crossing multiple bid-offer spreads and paying fees multiple times.

This comparison to peer exchanges was made by many both member and non-member respondents, with a clear view that the overall cost to trade on the LME was driving traders to seek alternative contracts which, while having a higher level of headline fees, were overall more efficient to trade.

While the LME does think that the drivers of slowing volumes have been multifactorial, it would not be helpful to obfuscate the impact that fee increases have had, particularly due to the unique structure of LME markets.

Some respondents highlighted the T4 booking structure as causing a particular problem as it results in fees for many client trades being three time the cost of a member trade. While the LME certainly understands that this discrepancy in pricing is a problem (and as discussed, can drive client business OTC), it also believes that the headline $2.70 per lot fee for an outright client trade compares favourably with similar contracts on peer exchanges. As such, the LME believes the discrepancy is better dealt with in specifically targeted ways to make transacting on the LME more efficient, and measures to equalise the cost of trading with clients OTC vs. using LME client contracts.

The LME believes that some carefully targeted fee adjustments to make LME trading more efficient would undoubtedly help to drive volume growth, but that this should also be combined with some structural changes to help reduce the overall cost burden of trading LME markets.

- **7.B Do you agree that the relative balance of carry and outright fees should be adjusted?**

Across the range of both member and non-member responses there was predominantly strong support for reducing the fees on carry trades. There was however a general feeling that while carry trades are currently too expensive, if outright trade fees were increased this would have a negative impact on many clients and members alike.

It was pointed out that reducing the fees on carry trades will greatly help make the traditional LME model of running a detailed spread trading book to facilitate client business more viable, which will in turn help to drive liquidity and thus all client business.

Several respondents felt that fees on carry trades should be priced relative to the amount of risk transferred in the trade, thus generally the fees should be proportional to the length of the carry, with several responses pointing out that many carry trades are effectively administrative in nature, and thus should be charged at a much lower fee. Other respondents felt that carries should be cheaper at the front of the curve, with a specific suggestion that anything out to the 4th monthly contract should attract a discount. There was also the suggestion that the LME's definition of short-dated carry should be adjusted to include any carry of up to 15 days, rather than only at the front of the curve as is currently the case.

Several clients were very supportive of reducing carry fees, and would like to be able to transact more carry business, though were also particularly supportive of initiatives to make spread trading more liquid on LMEselect, to increase transparency of carry pricing and the ease of trading spread strategies.

The LME is very receptive to the concept that carry trades should be priced relative to the risk transfer taking place, though it should also be noted that there were calls for less complexity in the fee structure, thus there is a balance to be struck.

The LME also agrees that more liquidity in spread trades on LMEselect would be a positive development, as increasing liquidity itself drives more trading and creates a virtuous cycle. It is also important to note that electronic liquidity in spreads will become ever more important as the LME develops its implied pricing infrastructure, as then spread liquidity will directly drive liquidity pooling between outright markets.

The LME intends to look to revise its fee structure, both to promote the existing short-dated carry business, and to give significant discounts for month-to-month carries as it believes these two areas are where there would be maximum positive impact of discounts; by promoting traditional "running a card" type business models, and by increasing efficiency for clients wanting to roll positions on a month-by-month basis. The LME believes it is appropriate to scale these discounts to in particular encourage liquidity on its lit execution venues, as by increasing this particularly transparent liquidity it will in general help participants to trade spread strategies more actively should they desire.

- **7.C Do you agree that the relative balance of house and client trades should be adjusted, in order to remove the significant financial incentive which currently exists to book client business on an OTC basis?**

While there seemed to be a relatively broad consensus among respondents that the LME should take steps to remove the incentive to take client business OTC, there was concern that if doing so resulted in high fees for members, then this may discourage trading generally and reduce volumes.

Most members were strongly encouraging of the LME responding to incentives to take client business OTC, and thought that the disparity between member fees and client fees were a large part of the driver of some client business moving OTC. That said, it was highlighted that if reductions in the client cross fee was offset by increases in the member trading fee, then this would have the impact to discourage business generally, particularly as members often have to do several trades to hedge client business.

Again, it was highlighted that the difference in fees is largely driven by the T4 booking structure, and there were some calls for a move towards T2 as this would result in a more equal trading cost between members and clients.

As mentioned earlier, the LME believes that the $2.70 per lot fee for an all-in client trade (made up of one member trade at $0.90, and two legs of a client cross, at $0.90 each) compares favourably with fees in similar contracts at peer exchanges. The LME also recognises the argument that increases to member fees would be detrimental to the overall level of business done on the LME, by reducing the ability of members to trade dynamic trading books to facilitate client business.

As such, the LME believes it should attempt to address the issue of OTC trading more directly, by starting to charge those who use LME prices embedded in OTC contracts with clients, thereby escaping paying the fee for an LME client cross. The LME believes this policy is also very much one of fairness, where those members engaging in the behaviour of booking LME client crosses (and paying the resultant fees), are not disadvantaged against those booking OTC client contracts.

- **7.D Do you agree that Ring trades should continue to attract a discount?**

As with question 3.B, this question about Ring trading was met with quite a variation in opinions from different types of market participants.

Some members believe that Ring trading fees should be further discounted from their current levels, while others believe that there should not be a discount at all for Ring trading relative to any other venue. Some members were supportive of a tiered pricing structure where additional volume brought lower fees, and there was some suggestion that Ring discounts should only remain if Ring-dealing members are obliged to quote other market participants for nearby spread trades. It was also suggested that trades actually transacted across the Ring should receive a lower fee than those trades agreed between floor traders outside of the Ring and Kerb sessions (note: this is currently the case, trades agreed outside of the Ring and Kerb sessions are deemed inter-office trades and thus attract a higher level of fees).

Similarly, there was a split between non-member respondents, with some feeling that Ring trading should be specifically supported by the LME and thus attract lower fees, and others questioning why one venue should attract lower fees than any other. Some respondents were of the view that LMEselect represents the most transparent venue, with the lowest operational cost, and thus should attract the lowest fees.

Very broadly, there was some consensus that as the Ring is used to set both the Official Settlement Prices, and the end-of-day evaluations, the LME should attempt ensure it has as much liquidity as possible, and thus the Ring should attract a lower level of fees than other venues. This view was put forward even by some respondents that also felt that in the longer term the LME should explore using alternative settlement procedures with more focus on LMEselect.

The LME agrees that it is very important to attract liquidity to both the Official Settlement Prices and the end-of-day evaluations. As such, the LME agrees that the Ring should continue to attract a discount, which also serves to recognise the additional investment that category 1 firms have made in LME trading.

- **7.E Should proprietary trading category 4 members receive a fee discount to reflect their commitment to LME membership?**

The answers to this question were largely covered in question 6.D, with the broad theme being one of fairness. Respondents felt that all members should have access to lower fees commensurate with their commitment to the LME, but that no one particular type of participant should receive preferential treatment compared to any other.

- **7.F Do you agree with the concept of an affiliate discount?**

The answers to this question were covered in question 6.B.

- **7.G Do you agree that LME should simplify its tariff structure and implement a combined trading and clearing fee?**

There was a broad split of opinion between all respondents on the question of having a combined trading and clearing fee. Some respondents felt that it would be simpler to just combine the two fees as every trade attracts both fees, other respondents value the transparency of the split between trading and clearing fees.

Several respondents questioned whether MiFID II regulation would allow for a combined trading and clearing fee.

On the subject of simplicity generally, there were calls from some respondents for a simplified fee structure which would be more easily understandable to market participants, as some felt that it was currently difficult to work out what fees would be applied to a given trade, particularly from the client perspective. On the other hand, some respondents were more supportive of a complex fee structure, given the complex nature of the LME's venues and date structure.

The LME broadly agrees that a simple fee structure which is easy to understand is beneficial, though does think that the unique complexities of the LME venues and date structure do mean that some level of complexity is unavoidable, and at times is helpful to allow efficient trading. As discussed earlier the LME would like to support short-carry trading, and carry trading generally, by offering lower fees for certain carry trades.

Without a clear consensus on whether a combined trading and clearing fee is desired by market participants, and acknowledging that it may be increasingly difficult from a regulatory perspective, the LME does not intend to change this aspect in the short term. In the medium term the LME will undertake a wider analysis of its fee structures along with its trading rules with the goal of simplifying where possible, while still maintaining a fee structure that allows for the complexity of both the LME date structure, and execution venues.

- **7.H Do you agree that, subject to relevant regulation, the LME should not permit the use of its market infrastructure for the settlement of trades executed on competitor platforms?**

While there was some variability of answers to this question, in general most respondents felt that the LME should protect its markets from competing exchanges and alternative execution venues.

Many respondents felt that the LME should look to pool all liquidity into its central execution venues, which then benefits all participants who can easily access this liquidity, where if multiple competing venues exist then this will split liquidity and make accessing LME markets generally more expensive for participants. On the other hand, some respondents felt that competition from alternative venues would likely drive efficiency, and that any additional choice in execution venue may bring new participants to the market.

Aside from the LME's commercial interests, the LME believes that all market participants are best served by increasing centralised liquidity to ensure maximum pricing competition and efficiency; as such, the LME does believe it should not in general permit the use of its market infrastructure for the settlement of trades executed on competitor platforms.

Some respondents pointed to the importance of being able to trade ex-cleared warrants, and that this is a key part of physical market trading in LME metals. The LME agrees with this point, and does not intend to restrict the trading of ex-cleared warrants, which forms an important pricing mechanism for metal held in different global locations and between varying brands.

- **7.I Do you have views on the LME's potential new contracts, and proposed changes to existing contracts?**

While some respondents felt that the LME should only focus on its current core markets, or operate a "back to basics" approach, in general the majority of member and non-member responses were supportive of the LME exploring new markets.

It was very clear from the responses that participants felt that the LME should undertake very detailed analysis of any potential new markets, and only launch products where there was a very clear demand from the industry. Respondents felt that the LME should engage with both the relevant industry to ensure buy-in, and work closely with members who will be able to service clients in these new products, and help to add liquidity.

Many member responses highlighted that they would be keen to work with the LME on any new contracts, and felt that the LME membership base will be key in adding the initial liquidity to contracts and helping them get off the ground.

In highlighting which contracts they thought the LME should explore, many respondents went into detail on the specifics of what they believed would and would not work, and why. The LME hugely values this information, and while it will not detail all the responses here, it will certainly engage very closely with all interested parties as new contracts are developed.

Many respondents were very supportive of the LME expanding the offering in ferrous products, specifically highlighting an interest in multiple different HRC contracts with differing regional focus, and similarly many respondents thought that there would be value in the LME offering iron ore contracts to complement the existing contracts offered on peer exchanges.

There was good support for the LME developing an alumina offering by several respondents, though there were questions raised as to whether this might remove some liquidity from aluminium. The LME believes that both markets are big enough to support deep liquidity, and that being able to trade the whole value chain in one place may bring entirely new entrants to the market.

Several respondents were supportive of the LME evolving its existing contracts to ensure that they continue to meet the needs of the respective markets. The LME will continue to engage closely with stakeholders, and utilise the vast experience on its various metals committees to ensure that any required changes are made in sympathy with the needs of the market. Broadly respondents felt that the major six non-ferrous metals only required small tweaks if any (though were encouraging of the LME to continue to evolve these contracts when necessary). There were some suggestions of how to amend the minor metals contracts (cobalt and molybdenum), with several respondents believing that these contracts would benefit from moving to a cash settled, monthly date structure similar to the LME ferrous contracts.

Regarding the existing LME options markets, several respondents were supportive of LME efforts to develop further liquidity, and specifically mentioned a desire to see electronic liquidity to make trading in options more efficient, and bring new participants who are more used to trading a premium based electronic market. There was some concern by other respondents that a screen based options market may reduce overall trading of options, as bank options desk will become disintermediated and thus overall liquidity will reduce.

The LME is keen to build out its existing options markets, and will continue to work with both its existing options market participants, and potential new entrants to build up liquidity in the inter-office market, and work to develop a premium based electronic offering, though this will likely be a longer term strategy, due to the required technology infrastructure uplift. The LME is sensitive to the fact that it must work with existing liquidity providers and utilise electronic trading as a way to bring new participants to the market, which will provide more business to existing market makers as the overall size of the market grows.

8. OTHER MATTERS

DISCUSSION QUESTIONS

8.A Are there any other matters you wish to raise in the context of this Discussion Paper?

With many of the responses there were a large number of additional subjects covered, some of which were only briefly touched upon within the Discussion Paper, and others were on areas not covered. Without going into the detail of every topic covered, the following areas were some of the most often touched upon by both member and non-member respondents.

- **LME technology infrastructure:** Many respondents felt that the LME technology infrastructure was lagging behind their expectations. This was often mentioned in a general sense when discussing trading connectivity to the LME, and the latency and technical capabilities of LMEselect and LME market data. The current order-to-trade ratio policy and associated charges was also mentioned as a deterrent to trading. There was also a desire from several respondents to see the LME standardise its technology systems as much as possible to peer exchanges, to reduce the technological burden to connect to, and trade on, the LME. It was pointed out that the technical customisation needed to trade, particularly the LME date structure, led to both barriers to entry for new participants, and existing participants being less able to respond to future changes.

  Some respondents asked for technology changes in the LMEsmart matching system, with several requests for improvements to the processing of give-up trades to allow for automatic matching, rather than the clearer having to input trade details which then requires them to receive trade reports from the client.

  There was some demand from non-members for the LME to provide a platform directly for clients to be able to access information on their clearing accounts, such as Unique Transaction Identifiers, and provide services for position reporting and reconciliation. While the LME believes this is certainly an interesting area to develop and would be keen to provide functionality where possible, the LME notes that the structure of net-omnibus segregated accounts (NOSAs) in use for most client business do not allow the Exchange or clearing house transparency on an individual client level, and so the LME would be unable to provide this service at the present time. Should extraneous factors result in a changing market structure, the LME will be keen to provide additional services to clients where possible

- **Trading hours:** A few members and clients requested that trading hours on LMEselect be increased beyond the current 18 hours

- **Tick values on spreads:** Along with a call for some wider tick values generally, many respondents queried whether it would be possible to have wider tick values for spread contracts on LMEselect, believing that larger tick values would help build liquidity as there would be less price fragmentation. As part of the tick-size review the LME will also explore the possibilities for increasing tick sizes for spread contracts, though the LME notes that there is a balance to be struck between having the right tick sizes for both month-to-month spreads, much shorter spreads such as tom-next, and simplicity of tick size rules

- **Fees:** Aside from the fee questions specifically highlighted in the Discussion Paper, there were several other areas highlighted by respondents. Several respondents felt that the LME's fee structure was overly complex, and called for a simplification. Several respondents also believe that the give-up fees charged by the LME are too high, and lead to a lack of execution options for clients

- **Market data:** Several respondents were very keen for the LME to increase the amount of market data available, to make market data easier to access, and to standardise this data to other markets where possible. It was felt that the T4 booking structure and variety of LME venues led to market data being difficult for participants to compare to other exchanges, and thus difficulty in quantifying liquidity levels and thus calibrate position and trade sizes. There were also requests for the LME to increase the data published on both the physical holdings, and deliveries of LME warrants, such as publishing detailed breakdowns of which firms are making and taking deliveries (as are published by some peer exchanges)

- **Warrants as collateral:** Some members highlighted that they, and their clients, would like to be able to use warrants as collateral more extensively, but felt that the current cost structure meant that it was too expensive. There was also a request for the LME to explore whether LME Clear might be able to accept collateral on a pledge basis, to reduce the balance sheet impact for members. This is an area that the LME is keen to explore to increase collateral efficiency

- **Options markets:** Several respondents highlighted some specific areas that they felt should be improved in LME options markets. It was felt that the current process for establishing a volatility surface and determining options valuation levels could be significantly improved, and that the expiry / assignment process was both too manual, and led to too long a period where members – and in particular clients – had already had to declare on long options positions, but were not aware of the assignments they faced on their short options positions. The LME agrees that there are significant improvements that can be made in this area, assisted by technology improvements, and will work with the LME options committee to determine improvements that can be made

- **US tax treatment:** Some client respondents highlighted that LME contracts did not receive 60:40 tax treatment in the US under Section 1256 of the Inland Revenue Code, and requested that the LME looked in to whether it might be possible to apply for this treatment. The LME understands that this treatment may make LME trading more efficient for US taxpayers, and will investigate the necessary applications

While these subjects were the most commonly highlighted additional comments, there were several other specific areas that were touched upon within both member and non-member responses to the Discussion Paper. The LME is incredibly grateful for all feedback, and would like to assure all respondents that while those issues mentioned by only a few respondents are not specifically covered here, the LME has considered all comments, and will use them to inform overall strategy, and specific decisions made on many areas.