

# Discussion Paper on LME Warehouse Reform

March 2019



SETTING THE GLOBAL STANDARD



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## 1. EXECUTIVE SUMMARY

In 2013, the London Metal Exchange (the “LME” or “Exchange”) began a programme of warehouse reform designed to address queues at certain warehouses listed for good delivery of metal traded on the Exchange, and to ensure that its global physical network infrastructure was operating effectively and efficiently. This reform programme was implemented over a period of three years and has achieved considerable success in taking action against queues, addressing high rents and Free on Truck (“FoT”) charges, increasing transparency and ensuring best practice. Since that time, the LME has continued to license and regulate a network of warehouses in 35 individual locations across 14 different countries.

More recently, however, the LME has become aware of concerns amongst stakeholders in respect of the level of stocks in LME-listed warehouses, and the ongoing debate over the causes of the reduction in these stocks. The LME’s objective is to operate an efficient physical network and market of last resort; however, the LME is also cognisant that retaining high levels of stocks on-warrant is considered by many market participants to be beneficial for the broader market in terms of liquidity provision, price discovery and transparency. And, while a decline in stocks can be driven by many factors (including a benign economic environment in which stocks are drawn-down for industrial consumption), the LME also recognises that its rules may have a material impact on the attractiveness of LME warehousing compared to alternatives (such as off-warrant storage).

Against that background, the LME was receptive to suggestions by the Warehousing Committee to consider the potential for reform.

This work emerged initially from the Warehousing Committee’s consideration of feedback received to the LME’s 2017 Discussion Paper on Market Structure. In response to the concerns and suggestions for improvements contained therein, in October 2017 the Warehousing Committee formed a “sub-forum” to consider, and formulate proposals for, potential reform that (i) achieved a broad degree of support from Committee members, and (ii) was largely consistent with existing safeguards provided to users of the warehouse network. The sub-forum, comprising volunteers from the Warehousing Committee and chaired by an independent chair, Phillip Crowson, first met on 26 March 2018 and has been working with the wider Warehousing Committee and the LME since then to refine a reform proposal.

As the next step, the Warehousing Committee agreed that it would be appropriate to seek feedback from the broader market through a discussion paper, which the LME agreed to draft. This discussion paper, then, reflects the proposals developed by the sub-forum and approved by the Warehousing Committee, and the paper itself has also been reviewed and approved by the Warehousing Committee. The proposals in it are those of the Committee, aside from Section 5 which comprises additional proposals put forward by the LME and which the Warehousing Committee have agreed to include in this paper in order to gauge broader market opinion. The LME now invites feedback on all the proposals contained herein. In doing so, and in order to assist the market in providing feedback, the LME has set out here its initial thinking on these proposals. It has, however, made no decisions and will wish to consider the responses received to this paper before deciding to take forward these or other proposals. If it does so, it will follow its usual procedures, including consultation, as appropriate.

The LME would welcome feedback from all market stakeholders, and details on how to respond to this paper are included in Section 6.

## 2. DISCUSSION PAPER BACKGROUND

### 2.1. Background to LME warehouse reform

In 2013, the LME initiated a programme of warehouse reform designed to address lengthy and persistent queues at certain warehouses in its global physical network, and to ensure that the operation of this network continued to demonstrate best practice for physical market infrastructure storage and logistics.

This programme of reform had been prompted by the extensive queues (as shown in Figure 1) which had built up at five warehouses in specific locations in the LME global network, following the global financial crisis of 2007-2008.

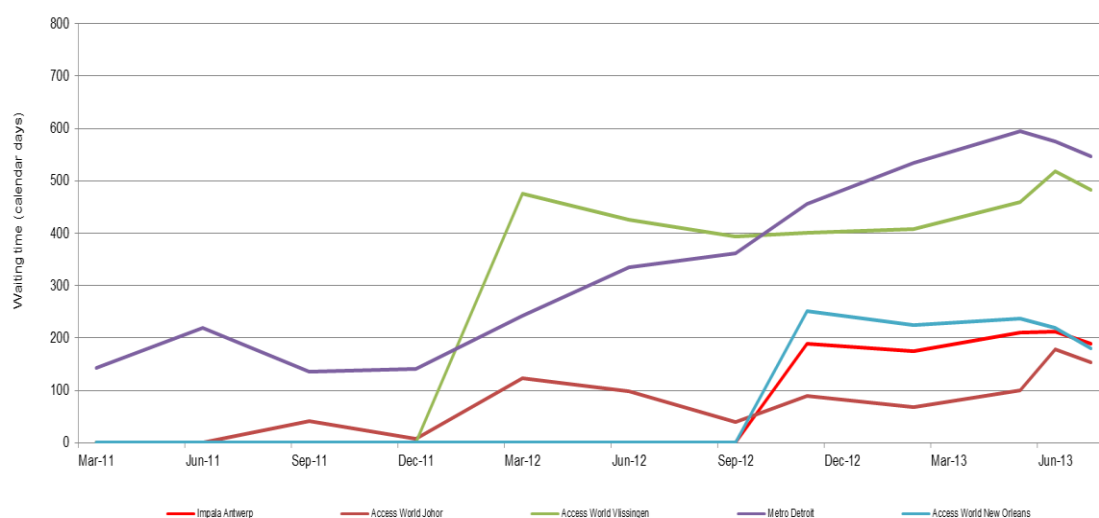


Figure 1: Queues of over 50 days at LME-listed warehouses as at 1-July-13

Such queues contributed to a depression of the LME price of metal – particularly of aluminium – as a proportion of the “all in” price, and concurrent increase of the proportion of the “all in” price represented by the premium. A chart showing the levels of premiums during the relevant period is shown in Figure 2.

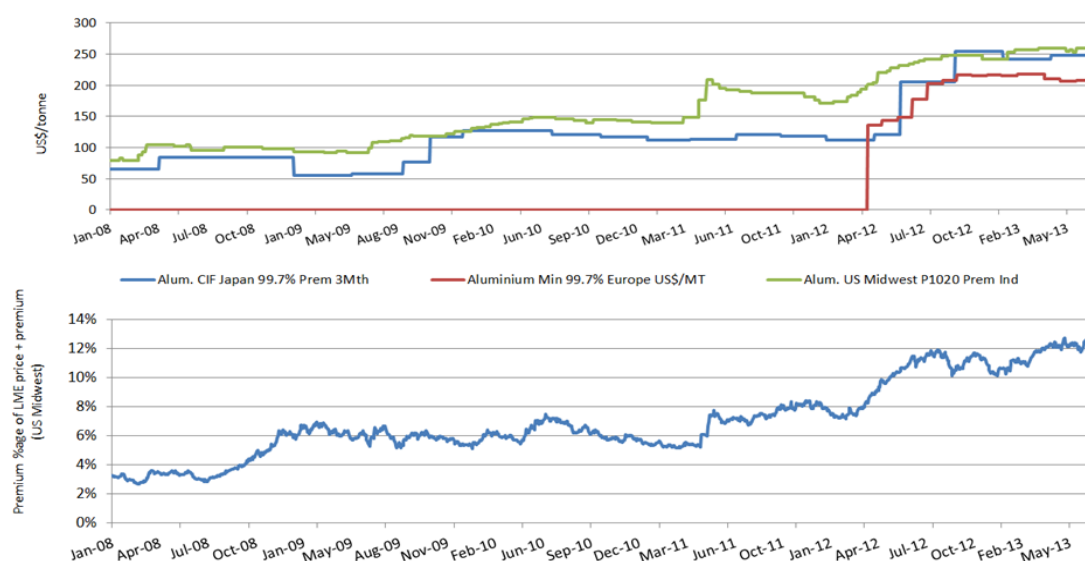


Figure 2: Premium prices as at 1-July-13

The queues, and the impact on premiums, led to concerns about the imbalance between the relative ease of loading metal into warehouses, versus the relative difficulty of loading it out. In response, the LME launched a market-wide, three-month consultation and in November 2013, announced an initial package of 12 reform measures, eventually becoming a 16 item reform programme over the course of the following three years. This programme was designed to address five main areas of reform as shown in Figure 3.

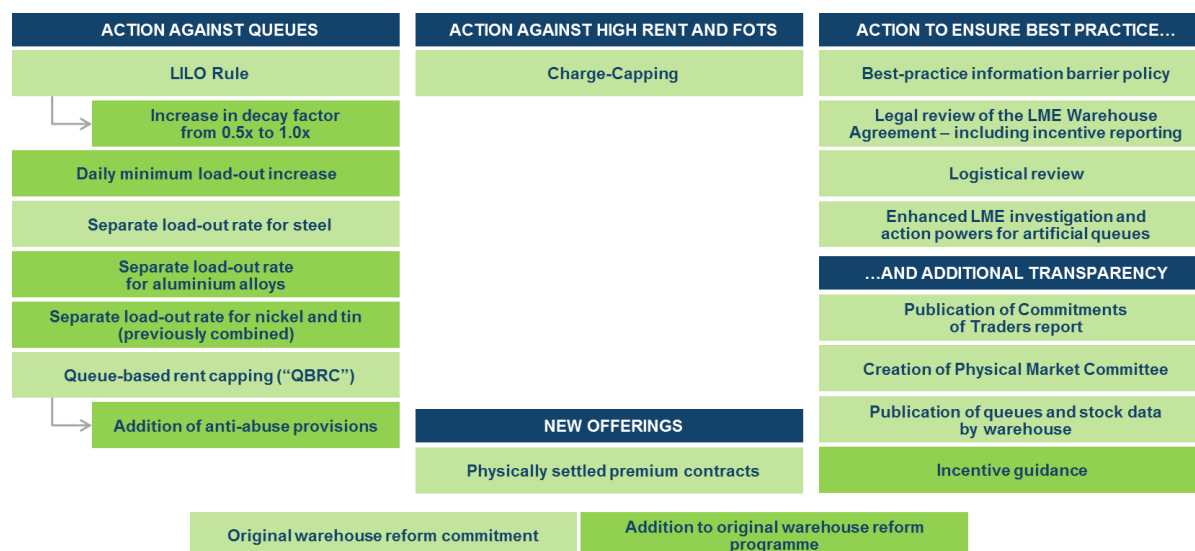


Figure 3: LME warehouse reform package

Extensive analysis has already been undertaken by the LME and others on the background causes and rationale of the build-up of warehouse queues, and this paper is not intended to provide a re-examination of such issues<sup>1</sup>; however, in order to fully assess the current status of the warehouse network, and to identify issues relevant to the ongoing attractiveness of LME warehousing, it is necessary to consider briefly the current status of the LME warehouse network and the impact of the reform programme since 2013.

## 2.2. Impact of the warehouse reform process

Over time, the warehouse reforms – designed expressly to reduce long queues at LME warehouses – had the intended effect, and queues reduced below the LME's 50 days threshold, as shown in Figure 4.

<sup>1</sup> All documents published by the LME in respect of this topic are available on the LME warehouse reform webpage at <https://www.lme.com/en-GB/Trading/Warehousing/LME-Warehouse-reform>

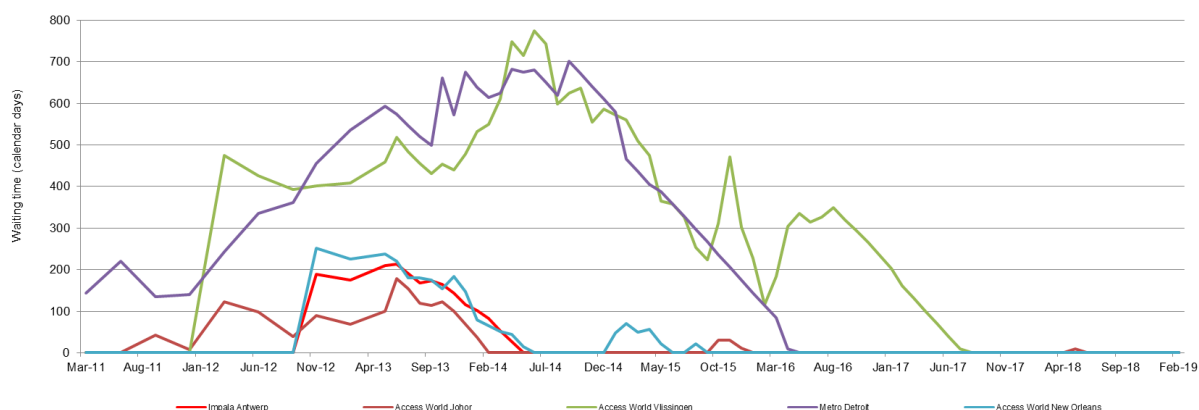


Figure 4: Post-reform development of queues at LME-listed warehouses from Figure 1 as at 28-Feb-19

Correspondingly, premiums also fell, as shown in Figure 5. The LME understands that the recent increase in the US Midwest premium, as shown from late January 2018 in Figure 5, is attributable primarily to sanction and tariff actions, rather than factors related to LME warehousing.

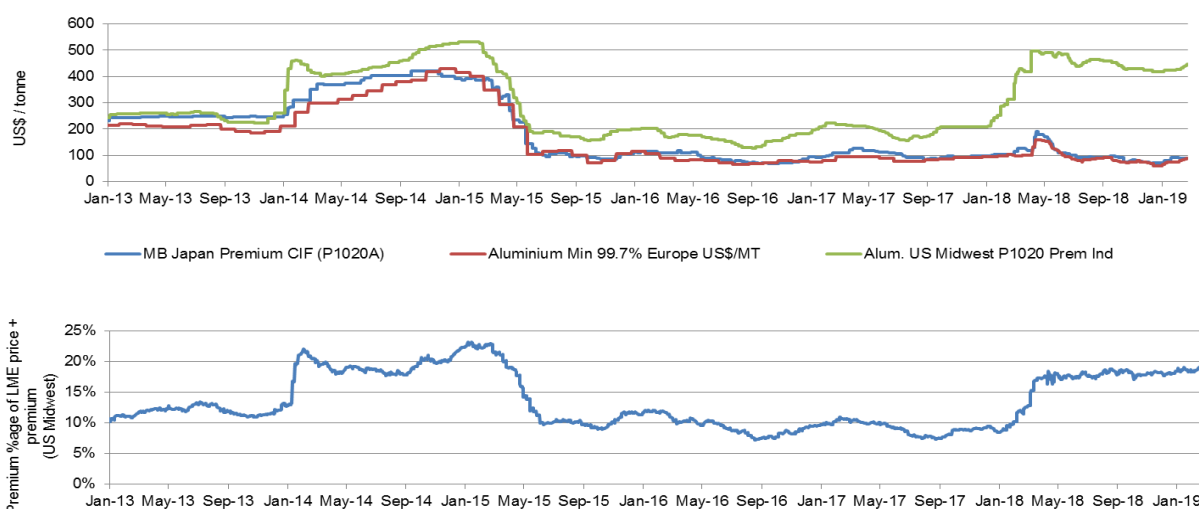


Figure 5: Premium prices as at 28-Feb-19

The market responded positively to the warehouse reforms, as well as the increased transparency engendered by the additional reporting provided by the LME in terms of stocks by location<sup>2</sup> and by the Physical Market Committee set up to increase communication between the LME and the physical market it serves.

However, the LME has been clear that an unintended – albeit fully anticipated<sup>3</sup> – consequence of the reform process would be a loss of metal from the LME system, with concomitant impact on the transparency of stocks stored globally, as demonstrated by Figure 6.

<sup>2</sup> See <https://www.lme.com/en-GB/Market-Data/Reports-and-data/Warehouse-and-stocks-reports/Warehouse-and-queue-data>

<sup>3</sup> See for example the Summary Public Report of the LME Warehousing Consultation dated November 2013, available at <https://www.lme.com/en-GB/Trading/Warehousing/LME-Warehouse-reform>



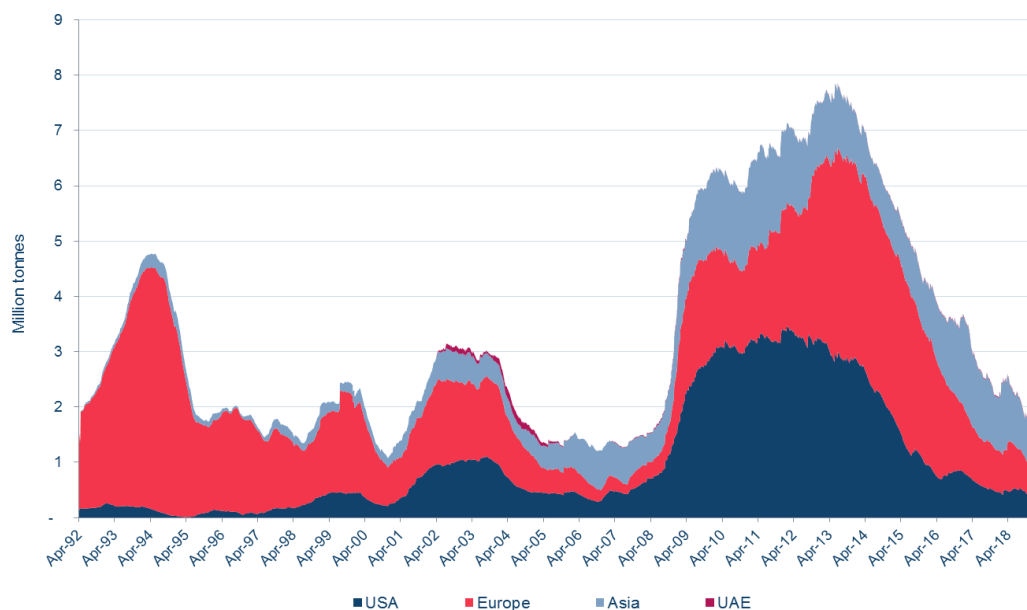


Figure 6: Stock at LME-listed warehouses as at 28-Feb-19

In addition to the Load-in / Load-Out Rule (“LILO Rule”), the LME later introduced the Queue-Based Rent Capping (“QBRC Rule”). The introduction of the QBRC Rule was due to continuing dislocation between the LME price and the price of equivalent metal in the physical market, and persistent queues at two warehouses. However, the perceived combined effect of the LILO and QBRC Rules (in the view of certain warehouse operators and other market participants) was to reduce the attractiveness of placing metal on LME warrant, resulting in the reduction in stock levels shown in Figure 6.

The possible drivers of this trend are considered in further detail in the following section.

### 2.3. Drivers of metal flow onto LME warrant

This section presents the LME’s current analysis on the drivers of metal onto LME warrant. The LME welcomes the views of market participants on this analysis, in accordance with the discussion question below.

The LME does not view maintaining or increasing the level of on-warrant stocks as a policy aim; the first priority of the warehouse network must always be to ensure the efficient settlement of LME contracts. However, the LME understands that many market participants would welcome a higher-stock environment, including warehouse operators (given benefit to their business model), consumers (given the benefits of visibly reported LME stocks), and traders (given the potentially positive impact on Exchange liquidity).

In analysing the flow of metal into its physical network, the LME believes there to be three primary drivers underpinning the use of LME warehousing, as outlined in Figure 7.

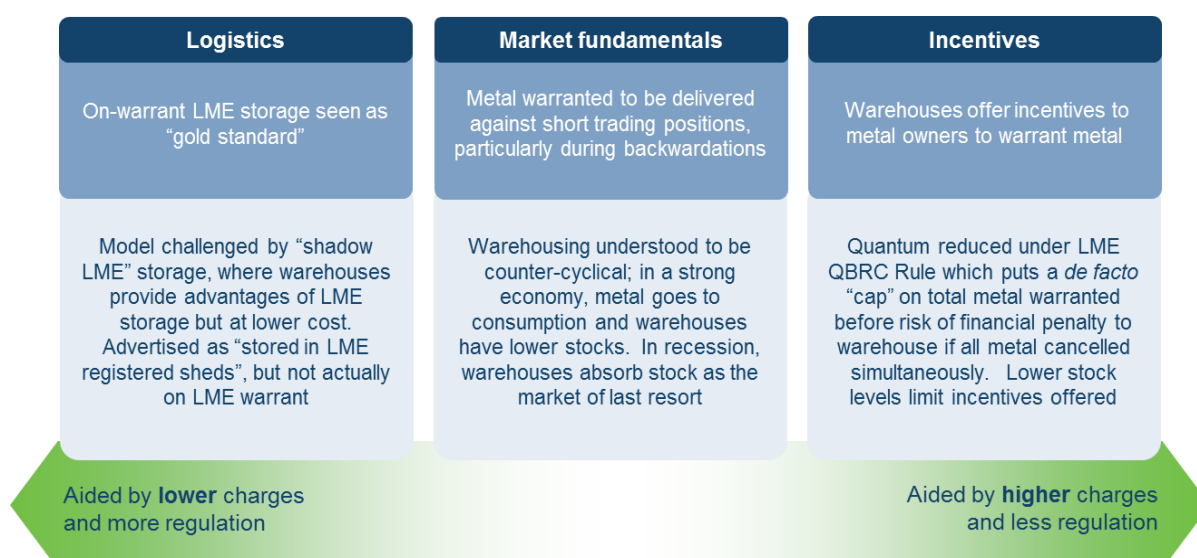


Figure 7: LME view on main drivers of metal flow into LME warehousing

- Market fundamentals.** Metal has to be warranted to be used in delivery against maturing short positions on the Exchange – and, as such, warranted metal is a necessary part of taking or receiving metal via LME trading. This is the most “core” use of the LME network – it is the only situation in which LME warehousing is not a substitutable service (because only warranted metal can be used in delivery against LME forward positions). However, because only a very small proportion of LME positions proceed to physical delivery, it is also generally responsible for only a small amount of LME tonnage (and there is little that the LME can do to enhance demand); conversely, the LME has no real concerns that its network will cease to perform this crucial function.
- Logistics.** LME storage is seen as the “gold standard” in terms of quality, physical security, insurance availability and logistical efficiency, to the extent that some banks require LME storage as a condition of financing, while insurers are willing to offer less restrictive coverage for metal stored on-warrant. Accordingly, it has historically been the case that significant quantities of metal have been held on LME warrant while financed, to take advantage of these logistical benefits. Such benefits are generally of interest to parties who load metal into a warehouse, and then plan to retain ownership for some length of time (and hence have an interest in the conditions under which the metal is stored).

Of course, the key driver for this business is availability of metal – and it would naturally be expected that less metal would be held in the LME’s network during times of greater consumption. However, recent years have additionally witnessed a strong growth in “shadow LME” warehousing, where LME-registered warehouse operators offer an off-warrant storage model, but with many of the advantages of LME storage. In particular, warehouses offer storage in or near LME-registered sheds, with the same standards of security, and a “standby” commitment to warrant metal whenever required for LME delivery. Furthermore, such metal is not subject to LME transparency requirements, which may be preferable for merchants who do not wish to advertise their stock levels to the market.

The main reported benefit of off-warrant storage, however, is cost. The LME understands that warehouse operators offer off-warrant storage at significantly discounted rent levels, compared to their headline LME rents. And, while most warehouses will negotiate reduced on-warrant rent



levels, the LME understands that economic attractiveness of off-warrant storage generally is regarded as superior.

The LME operates the Charge-Capping (“CC Rule”), which was introduced in order to check the growth in headline rent and FoT rates. However, while the CC Rule will likely effect a small real-terms reduction in headline charges (due to the impact of inflation during the five-year “standstill” period), it is unlikely (in its current formulation) to bring headline on-warrant rates materially closer to off-warrant rates.

- **Incentives.** Typically, warehouses offer incentives to metal owners to store their metal on-warrant. These incentives will generally be of interest to a metal owner placing metal on warrant, and subsequently selling those warrants in the LME market. Accordingly, the metal owner’s interest, when negotiating with a warehouse, will be primarily biased towards the incentive received, rather than the conditions under which the metal is stored after the warrant has been sold on.

For the avoidance of doubt, the LME does not take a fundamental position that the payment of incentives represents the core of a well-functioning warehousing network; however, the LME understands that incentives represent a key element of the reality of metals warehousing (including forming a central element of the business model of certain warehouse operators), and the level of incentives offered is a source of competition between warehouse companies. However, the LME believes that a market environment in which warehouses can pay incentives significantly in advance of the physical premiums which would otherwise be paid by metal consumers could exert a distortive impact.

Any incentives should be at a reasonable level to provide equally a valid and viable route for merchants and producers to monetise metal stocks. Self-evidently, incentives must be funded by the revenue which the warehouse expects to make from the future storage of the metal. Accordingly, a key driver of a warehouse’s ability to pay incentives will be the “rent-bearing dwell time” of the metal in the warehouse, i.e. the period of time for which metal can be expected to remain in the warehouse, paying rent to the warehouse operator. This, together with the FoT, represents the pool of revenue from which incentives can be paid.

During the period of structural queues, warehouses building such queues enjoyed a significant advantage, because it could be guaranteed that metal would remain in the queue for a certain period of time, thus providing an underpin to rent. As the LME articulated during its reform programme, the creation of queues for this purpose is clearly not desirable.

However, the LME understands that certain warehouse operators believe that:

- LME reform may have progressed too far in the opposite direction.
- There is a risk that, if a warehouse operator does not intend to create a structural queue but nevertheless takes significant quantities of metal into a warehouse for storage, a queue may nonetheless form if all metal owners were to request load-out at the same time. In this case, and particularly under the QBRC Rule, the warehouse operator may face a situation whereby free storage must be provided to metal owners in the resultant queue.
- This may reduce the willingness of the warehouse operator to pay incentives to metal owners to load metal into the warehouse.

The LME welcomes comments from market participants on possible reforms in this area.

**Discussion Question 1:** Are you concerned about the level of LME stocks? To what extent should the LME take policy action to increase on-warrant stock levels?

**Discussion Question 2:** Do you agree with the analysis set out in Section 2.3? If not, why not?

### 3. STRATEGIC PROPOSALS

#### 3.1. Load-out rules

The LME's current load-out rules are governed by the LME's Policy on the Approval and Operation of Warehouses<sup>4</sup>; however, for the purposes of this proposal, it is appropriate to summarise three of the core policy measures in respect of load-out:

- **Daily minimum load-out rate (Section C).** This rate imposes a graded increase on load-out rates based on the amount of metal on-warrant at the same warehouse company in the same location. It includes separate load-out queues for nickel, tin and aluminium alloys, as well for "non-dominant metals" caught in a queue which otherwise principally consists of one metal only;
- **The Linked Load-in / Load-Out Rule ("LILO Rule") (Section E).** The LILO Rule means that where a queue of over 50 days develops at a warehouse (an "affected warehouse") during a given three month calculation period, then, over a subsequent three month discharge period, it must load-out more metal than it loaded-in during the calculation period; and
- **Queue-Based Rent Capping ("QBRC Rule") (Section G).** The QBRC Rule requires that full rent for metal waiting in a load-out queue is only due for the first 30 calendar days of the queue. Between 31-50 days, this drops to 50%, and after 50 days, no rent charges will be levied.

Despite an initial preference from the Warehousing Committee to push for a simplification of the load-out rules, the process of discussion revealed the extent to which simplification would itself require a complex reform process, necessitating significant change to practices which are already established and embedded. Further, it is broadly accepted by the Warehousing Committee that the current minimum load-out rates do work, and any simplification of the rules would still require the use of the graded load-out rates and separate load-out queues for non-dominant metals – and, as such, true simplification would be hard to achieve. Accordingly, the Warehousing Committee decided not to advance a proposal for the simplification of load-out rules.

As a result, the Warehousing Committee has focussed instead on its concern that the current formulation of the QBRC Rule imposes an artificial capacity constraint on warehouses by imposing a *de facto* cap on the amount of metal which can be stored in one location before the warehouse company would incur a risk of financial penalties in the event that metal is cancelled in the same time period, an event which is outside the control of the warehouse company itself.

As such, the proposal that the Warehousing Committee wishes to advance is to extend the QBRC Rule period to 80 calendar days, with no 50% rent period – i.e. metal owners with cancelled metal caught in a queue would be required to pay full rent for 80 days, but zero rent from 81 days onward. This would increase the "cap" on metal stored by one warehouse company in one location, and help ensure that in the event of another economic downturn, the LME network would be able to act as the market of last resort. Furthermore, by reducing the financial impact of a large simultaneous metal cancellation, warehouses would expect to be able to pay greater financial incentives. However, the Warehousing Committee does not believe that the effect would be to push incentives above the point at which (in current market conditions) these became materially higher than physical market premiums.

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<sup>4</sup> This policy is available at <https://www.lme.com/-/media/Files/Warehousing/Approval-process/Policy-on-the-Approval-and-Operation-of-Warehouses.pdf?la=en-GB>

Furthermore, it is the view of the Warehousing Committee that the creation of “structural queues”, which was evidenced during the period of long warehouse queues, is no longer part of the business model of LME-listed warehouse operators. As such, warehouses are keen to emphasise that the extension of the QBRC parameter to 80 days should not precipitate a change in practice, whereby 80-day queues became a business “target”.

Nevertheless, it is important to be aware of the possible consequences of such an amendment, the most fundamental of which would be the ability of warehouses to exhibit queues of 80 days before being affected by financial penalties. While it remains the view of the Warehousing Committee that the market has moved away from a model which prioritises the creation of queues – and it advances the QBRC proposal in this context – it is worth noting that should such queues build up, this could have an impact on the liquidity of metal through the global delivery system. By setting the QBRC Rule threshold at 80 days, the economic effects of future potential queues would be expected to be significantly less than the previous multi-hundred-day queues; however, there are likely to be differing opinions in the market regarding this, and the LME welcomes feedback.

**Discussion Question 3:** Do you agree with the proposal to change the parameters of the QBRC Rule? If so, do you believe that 80 days represents an appropriate parameter?

### 3.2. Evergreen rent deals

Evergreen rent deals, also known as “lifetime” or “back-ended” rent deals, or “rent shares”, are incentives structured such that the metal owner placing metal onto warrant and subsequently selling the metal through the LME is then entitled to a proportion of the rent collected by the warehouse from the new owner, retaining a share in the metal they had previously owned until such time as that metal is loaded-out of the warehouse, or as otherwise agreed between the warehouse company and the original metal owner.

The debate over the use of such deals has been ongoing for some years and the market is broadly split on the benefits.

Those in favour believe that they play an instrumental role in incentivising metal to be stored on-warrant, from which the market benefits as a whole. The fact that they are cash-neutral – not requiring the payment of an upfront incentive from the warehouse to the metal owner – also means that smaller warehouse companies without access to substantial balance sheets can also utilise them, allowing them to compete with larger warehouses or those which are part of a group structure.

At the opposing end of the spectrum are those that believe that these deals prevent warehouses from maintaining that metal on-warrant, as the new owner is forced to load out in order to terminate the warehouse’s commitment to the original owner. This process then leads to a significant amount of technical (i.e. not apparently related to supply and demand fundamentals) stock movement within the LME network and between on- and off-warrant storage. Further concerns in respect of such deals relate to the confidentiality breaches potentially involved in concluding these deals – these concerns reached such a point that in October 2016, the LME published guidance to clarify the process via Notice 16/329 : A323 : W101 (“Guidance notice in relation to lifetime incentive arrangements”).

Finally, it is worth noting that regardless of the position on the relative advantages and disadvantages, there is a substantial section of the market which believes that it is not the LME’s role

to intervene in commercial arrangements between warehouse companies and metal owners, and as such, it should not take any action either way.

In order to address some of these issues, the LME Warehousing Committee has proposed amending the rules for evergreen rent deals to require the termination of such deals without the metal needing to be physically loaded-out. The Warehousing Committee's proposal is that the termination could be triggered at the point that the new metal owner cancels the metal, allowing the metal to then be re-warranted by the new owner, with the legacy evergreen rent deal having been "erased".

The LME's view (upon which it welcomes comments from the market) is that the commercial arrangements between a warehouse company and a metal owner are for those parties to negotiate, and the LME should only place restrictions on such arrangements in limited circumstances, such as where they were distortive, manipulative or have a disorderly effect on the market. Assuming there was clear evidence that such restrictions were appropriate, the LME believes that the Warehousing Committee's proposal might be structured in such a way as to restrict evergreen rent deals which only terminated on delivery-out of the metal from the warehouse, but to clarify that evergreen rent deals which terminated on cancellation of the metal (or perhaps on request from a metal owner to the warehouse company – see below) could still be permissible, provided that these arrangements were modest in scope and quantum, and would not have a manipulative, distortive or disorderly effect on the market and did not involve the transmission of confidential information to a third party.

Although this could lead to spikes in cancelled metal stocks, (and concomitant troughs in "live" metal stocks), these idiosyncrasies might be considered to be less damaging than forcing the metal to be moved physically from one warehouse to another in order to end a lifetime rent deal, a process which incurs otherwise unnecessary costs and other logistical issues. However, as contemplated above, it should be noted that the termination process could be facilitated in some other manner not even requiring cancellation, e.g. a right for a metal owner to simply demand the termination of a pre-existing rent deal by giving notice in writing to the warehouse company. This might be achieved by an amendment to the LME standard form warehouse agreement to require a warehouse company to terminate any evergreen rent deal on request from a metal owner.

Of course, if such a right of termination were to be granted to new metal owners (however triggered), it would be expected that many rational metal owners would choose to take advantage of such termination rights; accordingly, the value of an evergreen incentive to a metal owner loading metal into a warehouse would likely be reduced, and it may then be the case that metal owners simply demand cash incentives.

**Discussion Question 4:** Do you agree with the proposal to require the termination of evergreen incentives prior to physical load-out of metal? If so, what do you believe is the appropriate mechanism by which a new metal owner can terminate pre-existing rent share agreements?

### 3.3. Rent and Free on Truck ("FoT") reductions

The subject of headline rents and FoT rates has been under discussion since before the LME's 2013 warehouse reform programme, as rates for both have risen significantly over time, out-of-line with inflationary increases, and resulting in a situation where LME headline rates are considered to bear no relation to the cost of either bilaterally negotiated rental costs, or off-warrant rental costs.

In order to address this issue, in 2016 the LME introduced a rule which introduced price caps, and imposed on those caps a five year rent and FoT freeze – scheduled to end for the 2022-23 charge year onwards – followed by LME mandated annual increases based on the rate of the Consumer Price Index (“CPI”). Although it was agreed that this would not make a material difference to the existing delta between headline rate and “real” storage rates, it would – at a minimum – prevent this delta from widening further, and ensure that the problem did not resume once the five year freeze period had completed.

Although the introduction of charge-capping addressed the debate over headline rates for a period of time, the recent change in perception on the viability of warehouse operations has led to a resurgence of discussion on the topic. While the majority of those interested agree that the costs of on-warrant storage should be higher than off-warrant storage, as a reflection of the better quality of service and protection offered with LME storage (including the requirement that metal is stored indoors), there is otherwise – as with the majority of the issues addressed in this paper – a broad spectrum of opinions as to the merits of higher vs. lower LME rent costs.

For the purposes of this Discussion Paper, the Warehousing Committee has put forward proposals only in relation to rent charges. The Warehousing Committee considers FoTs to be out of scope due to the fact that extensive forward agreements based on FoT rates have been agreed between metal owners and warehouses, premised on the FoT rates caps at their current levels. Reducing those levels now would require extensive renegotiation globally of existing rental agreements.

In respect of reducing rents, those in favour of maintaining current rates argue that they fund a significant proportion of the incentives on offer for placing metal on warrant, and that in their absence, the motivation for warranting metal (further to the incentives driver outlined in Section 2.3 above) would be significantly reduced. Additionally, the argument is that the reduction required to make these costs comparable to off-warrant costs is too great to be realistically achievable. Finally, that even if rent reductions were achieved, this would not increase the motivation for storing metal on-warrant as, although the metal owner would benefit from increased protection under LME rules, they would equally be subject to LME load-out rules, as well as LME requirements more broadly, the most significant of which would be the requirement for the storage of that metal in an LME warehouse to be reported publicly.

Those in favour of reducing these charges disagree that lower rents would not incentivise more metal to be stored on-warrant, arguing that lower costs would directly encourage this outcome, as well as reducing the flow of metal out of the LME system. They argue that if the potential for queues is increased (as outlined in Section 3.1) and rents are not decreased in tandem, the LME would be exposing metal owners caught in a queue to a significant increase in the costs associated with loading-out metal from queued warehouses. On this point, it has also been argued that warehouse companies are only paid headline rent rates when metal is in a queue, and as such, lower rents would reduce the incentive to build such queues. Finally, there is a concern that higher rents allow for incentives which are considered distortive to the market, disrupting the natural trade flows of metal based on supply and demand, and resulting in price anomalies across the market.

**Discussion Question 5:** Do you agree that headline rents should be lowered? If so, and if you are a user of off-warrant storage, would you expect to make greater use of the LME warehousing network?

**Discussion Question 6:** Do you agree that FoT rates should be subject to reduction, or should they be considered out of scope?



## 4. OPERATIONAL PROPOSALS

Alongside the strategic proposals outlined in Section 3 above, the LME Warehousing Committee has also considered a number of potential operational improvements designed to assist warehouse companies in providing efficient and effective services to metal owners. Although a number of these are considered to be sufficiently uncontroversial as to be able to progress straight to consultation scheduled later in 2019, it was considered that the proposals outlined below would benefit from a broader range of input and as such, have been included in this paper.

### 4.1. Electronic certificates of analysis (“CoA”)

Certificates of Analysis constitute part of the formal documentation provided by producers alongside the production of the metal itself. They provide key information about the metal to which they refer, including chemical composition (confirming compliance with the specification for the relevant LME contract), and production cast reference. Metal cannot be placed on warrant at an LME-listed warehouse without the provision of the relevant CoA, with the exception of copper for which a CoA is not required.

To date, the LME has not imposed any requirements on CoA documentation, including the format (paper or electronic), or the amount of time allowed before the CoA is produced, and it has been argued that the lack of implementation of any such rules by the LME has led to a failure to modernise the production and circulation of such documents.

This can result in significant logistical difficulties. As an example, CoAs are produced alongside batches of metal. If that batch is subsequently split and sent to different locations, often the corresponding COAs are copied as a whole, and sent as one with each separate sub-division of the original batch of metal. If this division and subsequent combining with other batches of metal happens multiple times, each eventual shipment of metal can end up accompanied by a multitude of CoAs, many of which will have no relevance to any of the metal in that shipment. In paper form this requires extensive manual processing to identify and extract the relevant CoAs, and this is equally the case if the CoAs are produced in a soft copy in a form (such as scanned images) which does not allow for the searching of specific lot numbers. The longer this metal remains in LME system, or in off-warrant storage, the greater the chance that the paperwork deteriorates or gets misplaced, resulting in significant difficulties for the metal owner.

Further to the logistical issues associated with this lack of modernisation, it has been pointed out that the current situation also allows for potential bad actors to take advantage, at the cost of other market participants. As an example of such behaviour, critics have maintained that metal owners moving metal from one warehouse company to another – usually to take advantage of a more advantageous incentive deal – have been held up by warehouse companies who delay providing the relevant CoAs to prolong the life of that metal in their warehouses in order to maximise financials, or discourage such behaviour in the future.

Should the LME introduce requirements to produce CoAs in electronic form, or impose minimum standards for paper forms, including time limits, it is considered that this would represent considerable process efficiency for metal owners, warehouse companies and the market as a whole.

That said, the LME is conscious that the primary impact of imposing such a change on the market would be on the producers of its listed brands, many of whom would have to implement significant systems changes in order to achieve this end. Furthermore, this would not provide digitised CoAs of

metal produced before the rule came into effect and therefore would not be a solution to a large amount of metal already in the LME's warehouse network. Given the LME's concurrent work on responsible sourcing, the LME is also aware that its producer community is already facing a material investment of time and resource. As such, the LME would be especially interested in hearing from producers of LME-listed brands (together with market participants more broadly) on this topic.

**Discussion Question 7:** Do you support the mandating of electronic CoAs? If so, over what time period do you believe that such a change could feasibly be required?

## 4.2. Clarification to the definition of “load-out”

This relates to a specific line of the LME's Policy on the Approval and Operation of Warehouses; specifically, Section C, clause 9, which states:

*To qualify as a load-out:*

- (a) The load-out must be accompanied by a bill of lading or other document or correspondence (issued by a carrier to the Warehouse or issued by the Warehouse to a carrier), no matter the form of transportation, listing goods for transport and the intended recipient; and*
- (b) The recipient on the document at (a) above cannot be an entity which is an Authorised Warehouse or an off-Warrant warehouse located in the same Delivery Point where the metal is loaded out, if such Authorised Warehouse or off-Warrant warehouse is owned or operated by the Warehouse loading out the metal, or is a company in the Warehouse's Group. In the event that the document at (a) is issued by the Warehouse, then the Warehouse shall be responsible for the veracity of the information contained therein. In the event that the metal owner wishes to keep confidential from the Warehouse the destination of the metal, the Warehouse must contact the LME to discuss bespoke arrangements to demonstrate the load-out of the metal.*

***Any movement of metal which is not accompanied by a bill of lading or equivalent meeting the requirements of paragraphs (a) and (b) above shall not be counted towards a Warehouse's load-out requirements.*** Material placed into containers within an Authorised Warehouse may be counted as a load-out by the Warehouse provided that the container is sealed on that day. For the avoidance of doubt, a high volume of sealed containers should have no impact on the load-out requirements.

According to the understanding of some market participants, the line in bold above could be interpreted to mean that, in the event that a warehouse operator has met its total daily minimum load-out rate as specified by the LME rules, it is subsequently free to discharge further on-warrant metal in accordance with its preferences and those of the metal owner; in particular, the original warehouse company would be able to retain control of that metal (either off-warrant or warranted under another exchange), which is not permissible under the LME's existing rules. As such, this additional metal could be discharged in a manner which would not qualify as “load-out”, because the minimum load-out requirement would already have been met.

To date, the LME has always maintained that this is not the correct interpretation of the rules, and that all on-warrant metal loaded-out from LME-listed sheds must be done so in accordance with the LME's rules and regulations. Further, that this is consistent with the LME's rule as stated in the policy for Approval and Operation of Warehouses, Section C (Common standards of working practices and facilities for Warehouses), paragraph 15 which states:

*Warehouses are reminded that, in general, the daily delivery tonnages set out in this policy are minimum delivery out requirements, not minimum scheduling requirements [...]*

However, for the purposes of this paper and of obtaining broader market feedback, the LME is including this matter in this paper for discussion. In particular, the LME would be interested to understand whether market participants would value the ability to be more flexible in this regard, and any concerns as to potential abuse which could arise from such a relaxation.

**Discussion Question 8:** Do you support allowing warehouses to discharge metal not in accordance with the definition of load-out, provided that minimum quantities of qualifying load-out have been achieved? In any event do you believe that the definition of load-out should be clarified to reflect a definite position on this issue?

### 4.3. Free on Truck (“FoT”) charges currency denomination

In current practice, FoT charges are set and listed by the LME in the local currency of the location of the physical warehouse shed, in contrast to rent charges which are listed globally in US dollars (USD). It has been suggested that, for the sake of clarity and ease, the LME should instead list FoTs in USD, in line with the practice for rents.

Historically, the LME has published FoT charges in local currencies because load-out is a local task, often carried out by local staff; however, it has always been possible to pay in USD as long as the warehouse company and the metal owners have agreed as such, and have established a currency exchange rate with which they are both happy.

While the LME has no fundamental issue with amending its FoT charge caps to be listed in USD, consideration would need to be given to the exchange rate used to achieve such a conversion. While the LME acknowledges that this problem would be a one-off, as once converted the charge caps would be listed in dollars going forward, it is important to note the corollary to this, which is that any currency conversion rate chosen now would embed within it any current disparities between USD and the local currencies, and it could be argued that it would then carry that discrepancy forward into perpetuity.

As a potential alternative, the LME could clarify that its market participants are free to pay in any currency, provided that both parties agreed to the currency in question, and to the conversion rate from the original local currency listed by the LME.

**Discussion Question 9:** Do you support the denomination of FoT charges in USD?

**Discussion Question 10:** As an alternative to Discussion Question 9, do you support clarification by the LME that FoT charges can be paid in USD by agreement of the warehouse operator and the metal owner?

## 5. LME PROPOSALS

Together with the operational and strategic proposals put forward by the Warehousing Committee and outlined in Section 3 and Section 4 above, the LME itself would like the market to consider a number of potential operational and structural improvements designed to engender further clarity in stock reporting – both by the LME and warehouse companies – and improved traceability for warrantable copper stocks.

### 5.1. Eligible stock reporting

Over recent years, the LME has heard increasingly from market participants who are frustrated by the ability of metal owners to load LME warrantable material into listed warehouses over a series of weeks or months, and subsequently warrant it all on one day, with the potential to cause significant market movements as a result, movements of which only they would have been aware, and of which only they would have been able to take advantage. Although this behaviour is not explicitly prevented under the current rule structure, the LME does understand the concern.

In an eligible stock reporting model, warehouses would be obliged to report “eligible” stocks, being metal not on LME warrant, but stored in LME-registered sheds. The introduction of eligible stock reporting would mean that, while this behaviour was still permissible under LME rules, the market more broadly would be able to see the build-up of warrantable material in an LME-listed shed, and know that the possibility existed that it all could be warranted on the same day. In the event that metal owners chose to store that metal in a shed which was not listed on the LME, and therefore out of the scope of the reporting requirements, this would prevent the original behaviour as the metal owner would then have to physically move the metal into an LME-listed shed in order to place it on warrant.

As an additional point, the LME does believe that eligible stock reporting would represent a considerable asset in reducing the attractiveness of the “shadow warranting” practice outlined in Section 2.3 because it would mean it would no longer be possible to enjoy the benefits of LME storage without the need to report stocks publicly.

On the other hand, as the LME understands it, there are a considerable number of market participants who would argue against this proposal, objecting primarily on the grounds that they do not support the increased transparency engendered by such a change. Further, they point out that for those wishing to avoid such transparency, there exist myriad ways in which the rule could be circumvented. These include delisting sheds, storing metal in a shed which is not listed on the LME, or storing metal in a listed shed, but failing to complete all the formalities required to put the metal on warrant, for example, providing a Certificate of Analysis (“CoA”). Once the metal owner wanted to warrant the metal, this document could be produced in order to complete such formalities. However, it should be noted that eligible stock reporting is required by certain peer exchanges, and the LME understands that it does provide value for certain market participants.

**Discussion Question 11:** Do you support the principle of eligible stock reporting? If so, do you believe that it can be properly reflected in a rule which precludes avoidance, and meaningful data thus generated?

## 5.2. Amendments to the daily stock report

As with eligible stock reporting, the LME has heard a number of concerns from the market about the ability of metal owners to cancel metal – ostensibly for load-out – but not complete this process by scheduling the metal to be collected and removed from the warehouse. As such, this metal remains in “cancelled but not scheduled” status for an indefinite period of time, with no real intention on the part of the metal owner to realise the loading-out thereof.

The market’s concerns as to this behaviour are three-fold. Firstly, such activity could enable the metal owner to have a pool of warrants that can be scheduled on an expedited basis, as many of the formalities associated with loading-out metal would have already been completed. As such, should a second metal owner cancel metal for load-out, the first metal owner could observe this on the stock reports, request scheduling for their already-cancelled warrants, and hence ensure they can achieve a preferential position in the load-out schedule.

Secondly, it is possible that this “head start” on load-out could further be used to disincentivise other metal owners from cancelling their metal, as they can see from the cancelled stock figures that another metal owner will have the opportunity to “jump in front” on the queue.

The third and final concern is the impact that this behaviour has on the LME’s stock reporting. Currently in the LME’s daily stock report, “open” (live metal on warrant) and “cancelled” tonnage (cancelled metal waiting for completion of load-out formalities and scheduling for delivery) are reported separately, and the base case assumption is that the cancelled metal is awaiting load-out and as such, is no longer freely available for trading (although it is important to note that both open and cancelled warrants remain within the warehouse environment). However, if the metal owner has no real intention to load out, and instead to re-warrant, these figures could be considered to be misleading, and there exists the possibility that incorrect assumptions about this metal could influence trading behaviour on the basis of signals not related to the real activities of the physical market.

To address this issue, the LME has considered proposing a time limit on the period for which metal can remain in “cancelled but not scheduled” status. However, it understands from market participants that trading activity occurs using these warrants, which would no longer be possible were this proposal to be realised. As such, the LME is not proposing to limit the ability of market participants to cancel warrants without loading them out.

As such, the LME is instead considering a proposal to restructure its daily stock report to aggregate “live” and “cancelled but not scheduled” stock into a single category. A second category of “scheduled” would then be added. In this way, the stock report would only change when metal had actually been scheduled, indicating a more real desire on the part of the metal owner actually to take delivery of the related metal. Movements between live and cancelled metal would no longer be reported to the market, and the potential for abusive behaviour on the basis of such distinctions would be curtailed.

The LME notes that the split of stock reporting into “live” and “cancelled” was itself the result of a request from the market in the 1990s. As such, it notes that this proposal does, in one sense, reduce transparency (although additional transparency is provided in respect of the “scheduled” stock). The LME would be grateful for the views of the market on the correct balance to strike in this regard.

As an alternative, it could be possible to break stock reporting into three categories, namely (i) live, (ii) cancelled but not scheduled-out, and (iii) scheduled-out. This would provide greater transparency, but could still create potential for cancellation and re-warranting activity simply to move the figures between categories (i) and (ii).

Furthermore, any formal proposal would also need to consider the practical impacts of changing the reporting basis.

**Discussion Question 12:** Do you agree that the ability to cancel warrants, but not then schedule load-out from the warehouse, is an important feature for the market?

**Discussion Question 13:** Would you support a change to the stocks report as set out in this proposal (either aggregation, or three separate categories), or do you prefer to maintain the current report format?

### 5.3. Eligible copper – requirement for producer batch reference

Notices 17/321 (dated 25 September 2017) and 17/409 (dated 19 December 2017) advised the market that the LME is proposing to introduce a rule that would require the producer batch reference to be marked on the top cathode of every copper bundle. Notice 18/322 (dated 19 December 2018) subsequently advised that this rule change had been postponed until further notice.

The rationale for this proposal is to provide better traceability of the copper; in particular, in the event of a quality issue with that metal. However, it became apparent that a number of producers currently mark their batch reference by way of labels which – due to the way copper is stacked – will often become dislodged from the metal, meaning that this metal could no longer be traced appropriately and further, should this rule be introduced, would no longer be eligible for warranting in an LME-listed warehouse. In order to avoid this issue, the LME will need to contact copper producers and to advise those producers which use these labels to change their methods of marking the producer batch reference. Given the time needed for this process, the introduction of this rule has been postponed.

However, it should be noted that even with producers changing their marking methodology, this will still prevent metal produced prior to the change of marking from being placed on LME warrant once it has lost its label, and would stop metal currently on-warrant that does not have the producer batch reference from being rewarranted once loaded-out. For the avoidance of doubt, the LME cannot introduce a rule change for metal only produced after a certain date, as there would be no way of determining the date of production without, at the very least, the producer batch reference being marked on the metal.

The LME does believe that in the longer term, the producer batch reference should be marked on the metal itself (rather than on a label), and as such, that this rule should only be introduced once producers have been marking their producer batch reference on the metal in a more sustainable way for a period of time. The LME is concerned that a short term implementation would result in substantive amounts of metal being unable to be placed on LME warrant, causing unnecessary market disruption.

**Discussion Question 14:** Do you support the rule on marking producer batch references on copper? If so, do you support the delay of the implementation of this rule? Do you have any



alternative suggestions for addressing this issue?

**Discussion Question 15:** Are there any other matters which you wish the LME to consider in the context of this Discussion Paper?

## 6. FEEDBACK TO THIS DISCUSSION PAPER

The LME would like to thank its Warehousing Committee, led by its Chairman, Fabian Somerville-Cotton, for all the work it has put into proposing, refining and discussing the proposals contained within this Discussion Paper. The LME recognises that not every warehouse company supports every proposal contained in this paper, but remains grateful for the professional and collaborative approach that these companies have demonstrated during this process. More broadly, the LME welcomes feedback for all stakeholders in its market, and the broader metals industry, as to the proposals contained herein.

This Discussion Paper is open to all interested parties, including, without limitation, warehouse companies, members, clients of members and other parties. For the avoidance of doubt, the LME notes that this Discussion Paper does not constitute a formal consultation (pursuant to applicable legal and / or regulatory requirements).

The LME would be grateful for as many responses to this Discussion Paper as possible as they will be important in shaping subsequent actions. Responses to this Discussion Paper should be submitted in writing to [discussionpaper@lme.com](mailto:discussionpaper@lme.com), and may be submitted at any time prior to close of business on 31 May 2019. Responses made after this date may not be taken into consideration. Although the LME will consider responses submitted in any format, it would be helpful if respondents could reply to the numbered questions set out throughout this Discussion Paper and listed again for ease of reference below.

Any market participant wishing to ask questions or to seek clarification on any aspect of the Discussion Paper is asked to contact [discussionpaper@lme.com](mailto:discussionpaper@lme.com).

The LME may, in its discretion and having taken account of feedback, ultimately implement all, some or none of the proposals set out in this Discussion Paper. Where the LME seeks to implement a proposal, it may do so in the form set out in this Discussion Paper, or in a revised form. Further, in any subsequent consultation on changes to warehousing requirements, the LME may include proposals which are not covered in this Discussion Paper (for example to reflect suggestions from the market engagement process or the LME's own findings or otherwise). Were the LME to implement some or all of the proposals (or other proposals not covered in this Discussion Paper), it will aim to have communicated as such to the market by the end of Q3 2019.

The LME may need to share responses received with regulatory authorities, members of its group including LME Clear, its legal or other professional advisers, or as required by law. Anonymised responses (verbatim or paraphrased) may be included in any notice stating the outcome of this market engagement (although the LME shall be under no obligation to produce such a notice). The LME may share anonymised and paraphrased responses with its Warehousing Committee, as part of its process for defining next steps. Apart from this, all responses received will be treated in confidence (and, for the avoidance of doubt, will not be shared in non-anonymised form with any LME committee with external members).

## 6.1. Discussion questions

- 1) Are you concerned about the level of LME stocks? To what extent should the LME take policy action to increase on-warrant stock levels?
- 2) Do you agree with the analysis set out in Section 2.3? If not, why not?
- 3) Do you agree with the proposal to change the parameters of the QBRC Rule? If so, do you believe that 80 days represents an appropriate parameter?
- 4) Do you agree with the proposal to require the termination of evergreen incentives prior to physical load-out of metal? If so, what do you believe is the appropriate mechanism by which a new metal owner can terminate pre-existing rent share agreements?
- 5) Do you agree that headline rents should be lowered? If so, and if you are a user of off-warrant storage, would you expect to make greater use of the LME warehousing network?
- 6) Do you agree that FoT rates should be subject to reduction, or should they be considered out of scope?
- 7) Do you support the mandating of electronic CoAs? If so, over what time period do you believe that such a change could feasibly be required?
- 8) Do you support allowing warehouses to discharge metal not in accordance with the definition of “load-out”, provided that minimum quantities of qualifying “load-out” have been achieved? In any event do you believe that the definition of load-out should be clarified to reflect a definite position on this issue?
- 9) Do you support the denomination of FoT charges in USD?
- 10) As an alternative to Discussion Question 9, do you support clarification by the LME that FoT charges can be paid in USD by agreement of the warehouse operator and the metal owner?
- 11) Do you support the principle of eligible stock reporting? If so, do you believe that it can be properly reflected in a rule which precludes avoidance, and meaningful data thus generated?
- 12) Do you agree that the ability to cancel warrants, but not then schedule load-out from the warehouse, is an important feature for the market?
- 13) Would you support a change to the stocks report as set out in this proposal (either aggregation, or three separate categories), or do you prefer to maintain the current report format?
- 14) Do you support the rule on marking producer batch references on copper? If so, do you support the delay of the implementation of this rule? Do you have any alternative suggestions for addressing this issue?
- 15) Are there any other matters which you wish the LME to consider in the context of this Discussion Paper?