

To: All members, warehouse companies, London agents, and other interested parties

Ref: 16/136 : A132 : W045

Date: 6 April 2016

Subject: **DISCUSSION PAPER RELATING TO LME WAREHOUSING CHARGES**

## Summary

1. This Notice (the “Discussion Paper”) outlines possible reforms to The London Metal Exchange (the “LME” or the “Exchange”) physical network, designed to address market concerns as to whether customers are treated unfairly and unreasonably in respect of the headline<sup>1</sup> rates of LME rent and free-on-truck (“FOT”) charges levied by LME-registered warehouse operators (collectively, “Headline Warehousing Charges”). Concerns as to fair treatment centre on the significant perceived divergence between the Headline Warehousing Charges and the true economic cost of delivering the storage and logistical services to which these charges relate. In the view of many market participants and the LME, such divergence may give rise to a series of undesirable market effects, including:
  - (a) unfair treatment of customers who do not enjoy bargaining power, and hence cannot easily switch their metal storage arrangements without the payment of a significant “exit fee”;
  - (b) a “discounting” effect of LME pricing compared to the value of the underlying commodity which threatens the reliability and integrity of the LME’s price discovery arrangements; and
  - (c) a lack of market orderliness in respect of the annual submission of charges.

Accordingly, the LME wishes to discuss with the market a set of potential policy changes which may act to assuage these issues.

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<sup>1</sup> “Headline” refers to the rates notified by warehouse companies to the LME and published by the LME, representing the maximum rates which can be charged by that warehouse for storage and withdrawal of metals, as further set out in paragraph 20.



## The Discussion Process

2. The potential reforms set out in this Discussion Paper could, if implemented, have a material impact on the LME's market, or certain sections thereof. It is therefore considered appropriate to invite comment and feedback through a discussion process. Accordingly, this Discussion Paper is not a formal consultation: the LME reserves the right to consult on any proposed rule change resulting from the LME's dialogue with the market in accordance with the LME's contractual, regulatory and public law obligations.
3. The LME announced its intention, in Notice 16/071 : A069 : W023 ("Revised Rent and FOT Charges 1 April 2016 – 31 March 2017", 29 February 2016, the "Revised 2016-2017 Charges Notice"), to publish a Discussion Paper to explore the possibilities for implementing a longer term solution to high charges, and welcomed the thoughts of market participants to be considered for inclusion in this Discussion Paper. The LME would like to thank all those who responded to this invitation, and thus contributed to this Discussion Paper. However, and for the avoidance of doubt, all respondents remain welcome to make further proposals in the context of this Discussion Paper.
4. The LME invites comments and feedback on this Discussion Paper from all interested market participants, and also regulatory and governmental bodies. All feedback must be received by 18 May 2016.
5. The LME would be grateful for responses to this Discussion Paper in writing. Anyone wishing to submit a response, or to arrange for further discussions seeking clarification in relation to the Discussion Paper, is asked to contact Georgina Hallett at [consultation@lme.com](mailto:consultation@lme.com) or +44 20 7113 8780.
6. Although the LME will consider comments and feedback submitted in any format, to assist the process of considering responses it would be most helpful if respondents replied to the various numbered discussion points set out throughout this paper.
7. For the period during which the LME invites comments and feedback, the LME will, subject to reasonable logistical constraints, be available for meetings to discuss the subject matter of the paper.
8. The LME is not here consulting on any specific proposed rule. Any rule or rule change that might be proposed following this Discussion Paper may be subject to consultation with the market prior to implementation.



9. The LME will aim to provide an update to the market in relation to the Discussion Paper by July 2016.
10. The LME may need to share responses received with regulatory authorities or its legal or other professional advisers, or as required by law. Apart from this, all responses received will be treated in confidence.
11. Where used, defined terms are taken to have the meaning ascribed to them under the revised Warehouse Agreement pursuant to Notice 15/069 : W022 (“Changes to the Warehouse Agreement”, 2 March 2015) and revised Policy on Approval and Operation of Warehouses pursuant to the LORI and QBRC Implementation Notice<sup>2</sup>.

### **The Discussion Paper**

12. This Discussion Paper covers the following topics:

#### **Section 1: Background and context (from paragraph 15)**

- LME warehouse reform
- Background to, and analysis of, LME Headline Warehousing Charges
- Historical development and analysis of Headline Warehousing Charges
- Recent developments in respect of Headline Warehousing Charges
- Existing LME powers
- Elements of this Discussion Paper
- The structure of Discussion Items

#### **Section 2: Key considerations in respect of the discussion items (from paragraph 61)**

- Appropriate maximum levels of Headline Warehousing Charges
- Determination of Current Headline Warehousing Charges – per-operator or general, and choice of year
- Determination of Target Future Maximum Headline Warehousing Charges – location and metal granularity
- Determination of permissible increases in Target Future Headline Warehousing Charges
- Determination of rates of Worst-Case Bilateral Warehousing Charges
- Potential impact of promulgating Target Future Maximum Headline Warehousing Charges

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<sup>2</sup> Notice 15/372 : A359 : W121 (“Amendments to the Policy on Approval and Operation of Warehouses (implementation of LORI and QBRC) and clarification of certain points relating to the LME’s physical delivery network”, 25 November 2015, the “LORI and QBRC Implementation Notice”).



### **Section 3: Analysis of the Discussion Items (from paragraph 99)**

- Conversion to a fixed term warehouse agreement
- Charge-capping
- Charge threshold guidance
- Charge-based incentive guidance
- Converting from an “in-warehouse” contract to a “FOT-paid” contract
- Potential application of information barriers to all LME-listed companies

### **The LME’s financial interest**

13. As the market is aware, pursuant to the LME stock levy, the LME receives 1.1% of the rent charged by LME-licensed warehouses on LME-warranted metal (including metal waiting in queues). This rate has not increased since 2002, and the LME’s decision-making process, and its conduct of this Discussion Paper, is in no way influenced by the existence of the stock levy. The LME’s focus on ensuring that prices can be effectively discovered on the LME is essential in order for the LME to make sure that the market functions in an orderly manner in accordance with its regulatory obligations. It is also important to the LME’s value as an ongoing business. These two factors far outweigh any financial return which could accrue as a result of the stock levy on rents in any economic circumstance
14. In particular, the aim of the LME is to address high levels of Headline Warehousing Charges, and it is Headline Warehousing Charges on which the LME’s stock levy is calculated. Accordingly, if the LME achieves its policy aims, the expected outcome (assuming stocks remain unchanged) is that the LME will collect a reduced quantum of stock levy.

## **SECTION 1: BACKGROUND AND CONTEXT**

### **LME warehouse reform**

15. The LME is a “recognised investment exchange” (“RIE”) recognised and supervised by the Financial Conduct Authority (“FCA”) under the UK Financial Services and Markets Act 2000, as amended (“FSMA”). To remain recognised, an RIE must at all times ensure, and be able to demonstrate, that it continues to satisfy the requirements for RIEs under the FSMA (Recognition Requirements for Investment Exchanges and Clearing Houses) Regulations 2001 (the “Recognition Requirements”). Under the Recognition Requirements, the LME must therefore, among other requirements, ensure that: (a) contracts admitted to trading on its



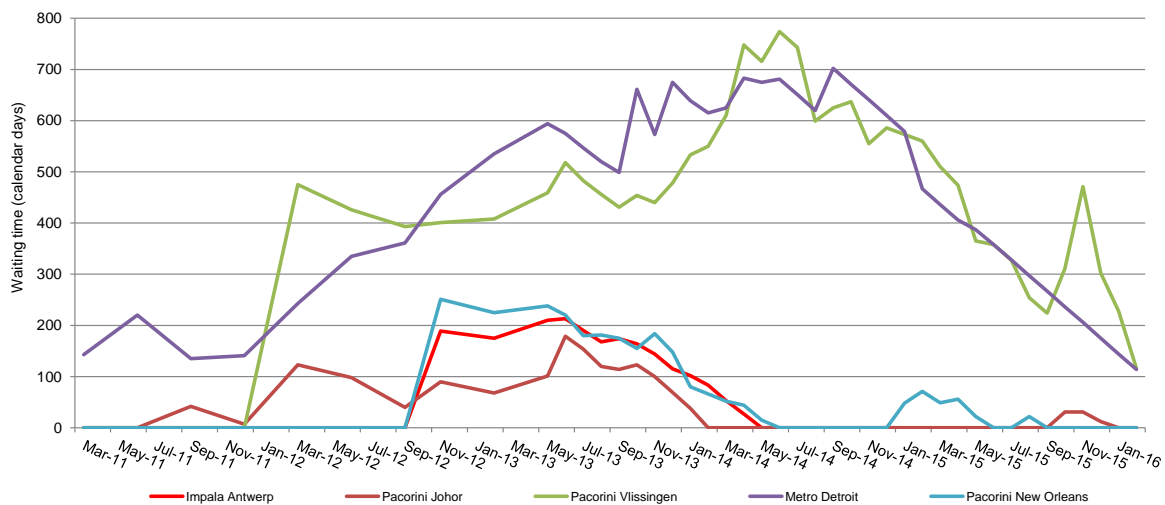
markets are capable of being traded in a fair, orderly and efficient manner, (b) the arrangements for determining the settlement price of its contracts must be such that the contract price properly reflects the price of the underlying metal, (c) there are adequate settlement and delivery procedures for the metal traded on the exchange, and (d) business conducted by means of its facilities affords proper protection to investors. As the LME's arrangements with its network of approved warehouses play an important role in the functioning of the LME's market and the trading of its contracts, the LME needs to be able to demonstrate that it has arrangements in place to ensure those warehouses operate in a way that ensures the LME continues to satisfy its regulatory obligations.

16. To this end, in November 2013, following a three-month market-wide consultation<sup>3</sup> (the "2013 Consultation"), the LME announced a comprehensive package of warehouse reform comprising twelve key measures (the "2013 Reform Package"). At the heart of these was the Linked Load-In / Load-Out Rule (the "LILO Rule") which was implemented on 1 February 2015 and which requires LME-listed warehouses with queues of over 50 days to load-out more metal than they load-in. Eleven of the twelve items (plus additional measures such as a separate load-out rate for aluminium alloys and an increase in the decay factor under the LILO Rule) have now been implemented, or are due to be implemented shortly. Full details and copies of the relevant notices and additional documents are available on the LME website at:  
<http://www.lme.com/trading/warehousing-and-brands/warehousing/lme-warehouse-reform/>
17. The LME is pleased to observe the positive impact of the 2013 Reform Package on the physical market. In particular, the LME notes that its commitment to address existing queues and prevent future queues<sup>4</sup> has led to a significant reduction in queues.
18. The graph below shows the longest waiting time in calendar days at the five warehouses which had queues on 1 July 2013 (being the start of the 2013 Consultation).

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<sup>3</sup> See Notice 13/208: A201: W076, ("Consultation on Changes to LME Policy Regarding the Approval of Warehouses in Relation to Delivery Out Rates", 1 July 2013).

<sup>4</sup> Most recently, and pursuant to Notice 15/072 : A071 : W025 ("Discussion Paper relating to possible reforms of warehousing policy and physical delivery network", 2 March 2015, the "2015 Discussion Paper"), through the implementation of a load-out rate increase on 1 March 2016, and the forthcoming implementation of a queue-based rent cap due on 1 May 2016.



*Queue development at warehouses which exhibited queues as at 1 July 2013 (data as of 29 February 2016)*

19. The twelfth item from the 2013 Consultation is the LME’s commitment to investigate structural solutions to Headline Warehousing Charges which are, in the view of some segments of the market, too high. As set out below, considerable attention has already been paid to this topic by the LME – however, the matter is not yet resolved, with the resultant need for this Discussion Paper.

**Background to, and analysis of, LME Headline Warehousing Charges**

20. Under its agreement with the LME (the “Warehouse Agreement”), each warehouse operator must fix its maximum rent rates and FOT charges (i.e. its Headline Warehousing Charges) annually in respect of each 12 month period commencing 1 April by notification to the Exchange not later than 1 December in the preceding year. Therefore, each year in early November, the LME Physical Operations department asks all of its listed warehouse operators to submit their proposed Headline Warehousing Charges for the next annual cycle, which runs from 1 April to 31 March.
21. Warehouse operators must submit their proposed Headline Warehousing Charges to the LME by 1 December. Under the Warehouse Agreement, at any time within 10 Business Days of receiving the proposed charges, the Exchange may, at its discretion, require the warehouse to provide, within 10 Business Days, a comprehensive, written explanation of the economic circumstances which, in the view of the warehouse, necessitate the change in its Headline Warehousing



Charges. However, the Warehouse Agreement does not prescribe that the LME can require that the warehouse operator reduce its charges.

22. Final Headline Warehousing Charges for the next cycle are published by the LME before 31 December each year. These are maximum charges – warehouses are always free to offer reduced rates on an *ad hoc* basis to particular metal owners in respect of particular metal storage activities.
23. As outlined in previous notices<sup>5</sup> the LME has consistently highlighted that its market exhibits a number of features, including the process outlined above and the factors listed below, which mean that there is very little downward pressure on Headline Warehousing Charges.
24. When a metal owner places metal on warrant, they have two options:
  - (a) The metal owner may retain the warrant and eventually either withdraw the metal from the warehouse themselves, or sell the warrant bilaterally to a counterparty who will factor frictional costs of storage (including anticipated rent and FOT charges) into the purchase price. In this event, the metal owner depositing the metal will be motivated to negotiate rent and FOT rates<sup>6</sup> with the warehouse company, because the costs will be borne either by the metal owner themselves, or by the buyer to whom the metal owner sells the warrant bilaterally, with a consequent reduction of purchase price that the buyer is willing to pay to the metal owner. In this scenario, therefore, the Headline Warehousing Charges are not relevant, since (in the understanding of the LME) a significant discount will be offered by the warehouse – and, importantly, the Headline Warehousing Charges are not even used as a basis for negotiation (i.e. both the warehouse operator and the metal owner recognise that the Headline Warehousing Charges are simply not relevant for storage under this model, and so discuss absolute rates of bilaterally-negotiated charges, rather than percentage discounts from the Headline Warehousing Charges). In particular, metal owners are not guided by the Headline Warehousing Charges in assessing at which warehouse they may

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<sup>5</sup> For example, Notice 15/190 : A186 : W062, (“Discussion Paper – Feedback and Analysis”, 1 July 2015, the “2015 Discussion Paper Results Notice”), and the LORI and QBRC Implementation Notice.

<sup>6</sup> It is the understanding of the LME that metal owners depositing metal under this model (a) will almost universally negotiate discounted rent rates. In respect of FOT rates, owners may (i) opt to take an up-front cash incentive and then effectively repay this via acceptance of the headline FOT rate at the time of metal withdrawal, (ii) negotiate a discounted FOT rate, in which case an up-front cash incentive payment will not be available, or (iii) a combination of the two (a more modest incentive payment balanced by a less-heavily discounted FOT payment). In all cases, because any payment of incentive to the metal owner will be funded primarily by the payment of the FOT by that same metal owner at the time of metal withdrawal, the economics should balance (including the effect of time-value-of-money between incentive and FOT payments).



achieve the lowest bilateral charges – just because a warehouse has relatively high Headline Warehousing Charges, this does not indicate that it will be in any way uncompetitive in negotiating relatively low (and hence attractive) bilateral storage rates.

- (b) The metal owner may sell the warrant through the Exchange. Under this model, the metal owner will keep the metal in the warehouse for some period of time, and subsequently sell the metal on the LME (after which the metal may change hands a number of times before it is eventually withdrawn from the warehouse). In this case, the metal owner only bears the cost of storage prior to delivering the warrant on the LME, because the LME delivery mechanism has no adjustment to give credit to warrants which are subject to more advantageous (i.e. lower) storage costs<sup>7</sup>. Because negotiating lower post-delivery rent and / or FOT rates for the particular metal being sold on the LME would not affect the price achieved on the LME, the metal owner has no motivation to negotiate rent and FOT rates with the warehouse company, and will generally be content for the warehouse to levy its Headline Warehousing Charges on the new owner. Instead, the LME understands that it has become common practice for warehouse operators to offer financial incentives to metal owners to attract load-in of metal. These incentives are funded by the anticipated rent and FOT paid (at the rates set by the Headline Warehousing Charges) by the subsequent acquiror(s) of the warrant on the LME.

25. A warehouse operator looking to offer an incentive to a depositor of metal will generally model the expected economics arising from that metal during its time in the warehouse. Such economics will be a combination of (i) the expected rent, based on the daily rent level multiplied by the number of days for which the new owner is expected to keep the metal in the warehouse, (ii) the FOT, which must be paid when the metal is eventually withdrawn (although at an unknown future date, giving rise to a potential discounting effect), and (iii) other logistical and service charges which may be paid by the new owner. The expected “rest time” per item (i) has historically been increased by the presence of load-out queues at certain warehouses, although the LME’s actions to reduce the length of queues, and the forthcoming introduction of Queue-Based Rent Capping (“QBRC”) which limits the rent chargeable in respect of metal sitting in queues, has significantly reduced this effect. Accordingly, the key charge in respect of setting incentives is now broadly FOT, given that this is an “exit barrier” which must be paid in order to withdraw any

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<sup>7</sup> The only adjustment mechanism is in respect of the accrual of historical rent, not the susceptibility of the warrant to a given level of Headline Warehousing Charges going forwards.





metal from the warehouse. Furthermore, the effect of the FOT is to “lock in” high rents – because, in order to move metal to a lower-cost negotiated rent environment, the FOT must still be paid to the incumbent warehouse, which raises the frictional cost, and may result in metal owners continuing to pay higher rents, in order to avoid paying the high FOT in order to move storage location.

26. Because of the lack of downward pressure on Headline Warehousing Charges where the metal owner intends to deliver the warrant on the LME, the LME understands that warehouse companies compete on incentives offered, rather than Headline Warehousing Charges. Such incentives may take several forms, including free or discounted shipping, cash payments or below-cost storage of the metal in the period prior to its onward delivery by the original metal owner.
27. So, in summary, the party putting the metal on warrant with the intention of selling that warrant on the LME has no motivation to negotiate rents and FOT rates; in contrast, the subsequent acquiror of the warrant on the LME has no leverage over rents and FOT rates. Headline Warehousing Charges and incentive payments hence interact in a deterministic way, with high FOTs acting to lock in rents. The higher the rents and FOTs, the higher the financial incentives the warehouse operator can offer the metal owner. It is a self-reinforcing system. The large majority of metal loaded-in with the intention by the metal owner of eventual sale on the LME will be attracted, through the incentive mechanism, to warehouses which are able to offer high incentives (primarily, in the absence of queues, through high Headline Warehousing Charges).
28. The nature of the economic system, in the view of the LME, incentivises warehouse operators to increase their levels of Headline Warehousing Charges. In general, a charge-setting process exhibits a natural downward tension, because those businesses setting more competitive charges will tend to see a greater level of business. However, because in the LME system the levels represent maxima, setting high Headline Warehousing Charges in no way impacts the ability of a warehouse to compete for metal stored under model (a) above, in that the warehouse can simply offer discounted charges when asked by a metal owner looking to deposit metal and then withdraw it again in the future. However, under storage model (b), warehouses with higher Headline Warehousing Charges are able to offer greater levels of incentive, and hence are better-positioned to attract metal from owners looking to deposit metal and then sell such metal on the LME. Accordingly, economic feedback in the system acts to drive Headline Warehousing Charges upwards.



29. This effect is further accentuated by the competitive tension between warehouses. A warehouse submitting Headline Warehousing Charges for a given rent year will, in general, be concerned to ensure that such charges are as high as possible compared to competitors, given that this will enhance its ability to pay incentives and attract metal as set out above. If the warehouse submits lower Headline Warehousing Charges than competitors, it may find itself at a competitive disadvantage when sourcing metal, with such disadvantage lasting for the entire year, given that Headline Warehousing Charges cannot be increased intra-year. Accordingly, the inducement for charge-setting militates to “err on the upside” – in general, there is little downside to submitting Headline Warehousing Charges higher than those of peers, and significant downside to submitting charges lower than those of peers. Because the Headline Warehousing Charges are submitted by warehouses acting in isolation, with limited signalling mechanisms in the market, the logical outcome is one of an “upwards spiral”. This effect is compounded year-on-year, whereby an operator which has submitted lower increases than peers for a given charge cycle may be economically disadvantaged in terms of sourcing metal, and then attempts to compensate by submitting an “adjusting” above-market increase the next year. This process of “leapfrog” carries a significant risk of an accelerating rate of increase over a period of several charge cycles.
30. There exists an additional concern with FOTs, in that warehouses offering relatively low levels of FOT will generally suffer greater outflows of metal, in comparison to warehouses with higher levels of FOT. This is due to the role of FOT as an “exit barrier”, in that a buyer of metal taking receipt of a set of warrants through LME delivery, and looking to access some proportion of the underlying metal, will preferentially cancel warrants with lower FOT, as the frictional cost of withdrawal is lower. Indeed, even if the metal is not required for physical use, a buyer of the warrants may cancel metal in lower-FOT warehouses in order to move it to higher-FOT warehouses and benefit from the resultant incentive. This hence represents a further factor driving up Headline Warehousing Charges.
31. On the basis of the arguments above, it would at first glance seem that the LME warehouse network does not obey the general economic principle that offering goods or services at a lower price (in this case, at lower Headline Warehousing Charges) should, *ceteris paribus*, increase the demand for such services. However, the view of the LME is that Headline Warehousing Charges are simply not the venue in which competitive forces meet. Instead, the determining factor for metal owners looking to store metal and then withdraw it is the level of discounted charges offered by warehouse operators (in respect of which there is fierce competition and hence a downward force on prices, as would be expected), and the determining factor for metal owners looking to deposit metal and then sell on the LME is the level of



incentive (so in this context, metal owners are effectively sellers of the right to store their metal, and rationally accept the highest bid in respect of that right).

32. It should be noted that all LME warehouse operators also face a set of factors specific to their particular business model (e.g. long-term agreements for metal storage or captive flows of metal from parent organisations which do not necessarily require the payment of significant incentives, restricted access to financing which may constraint the regular payment of incentives) which results in each operator managing their operations to specific business models. Accordingly, it should not be supposed that all warehouse operators are motivated by precisely the same behaviours, and hence not all warehouses set Headline Warehousing Charges with precisely the same set of intentions.
33. However, there are a sufficient number of warehouse operators pursuing an incentive-led model of metal sourcing (funded by high Headline Warehousing Charges) that the highest observed Headline Warehousing Charges are driven by the analysis set out above. Because the LME market operates on the basis of “seller’s option”, a market participant delivering warrants in settlement of an LME contract will always look to deliver the “worst warrant” – which is likely to be the warrant with the most onerous conditions attached, particularly in respect of liability for the new owner of the warrant to pay high Headline Warehousing Charges in respect of the underlying metal.
34. Accordingly, the clear net effect is one of an environment where Headline Warehousing Charges are substantially higher than the true economic cost of delivering the storage and logistical services to which these charges relate. This has, in the view of the LME, three core undesirable effects:
  - (a) Those taking delivery of warrants on the LME market may, because of the Headline Warehousing Charges, pay a set of charges (rent and FOT) in respect of metal storage and withdrawal which is higher than would be justified by the cost of providing these services, and is higher than which would be encountered if sourcing the metal through a different procurement route. While, as set out below, the majority of those taking warrant delivery on the LME market are likely to be professional merchants who will have adjusted for such frictional costs in their economic modelling, it remains the fact that one of the LME’s functions is to provide a “market of last resort” for those buying (and selling) metal. An unduly high logistical cost burden will naturally weaken the LME’s ability to fulfil this role, and subject those using the market for this purpose to a greater frictional cost of usage than would be rational in a well-functioning economic system.



- (b) In general, warrants on the LME market are taken in settlement by merchants, rather than by physical users. These merchants will factor in the logistical cost of accessing the metal they have purchased, and hence when bidding for metal on the LME market, will bid at a level below the “true” price of the metal, i.e. they will apply a discount equal to the logistical frictional costs of converting an LME warrant to metal which can be sold to an end-user (or alternatively, re-warranted with another warehouse in exchange for an incentive). Accordingly, the LME’s cash price will generally trade at a discount to the “real-world” price of metal (which is typically observed by the market as the “real-world” price of metal trading at a premium to the LME cash price).

To a certain extent, this is unavoidable in a global physical delivery network – there will always exist a discount due to the fact that a warrant delivered on the LME may be in any LME Delivery Point, and of any LME-recognised brand or shape. Historically, the existence of queues has added further to the discounting effect – although, as set out above, the LME’s reform programme is reducing queues, and consequently the impact of such queues on the LME price. However, the Headline Warehousing Charges have always been – and will continue to be – a significant driver of the discount embedded into the LME price, given that (as set out in paragraph 33) the warrants with the highest Headline Warehousing Charges will generally be seen in settlement, and hence drive the LME price. In particular, the FOT represents effectively a dollar-for-dollar discount, given that – in order to convert an LME warrant (representing the LME price) into readily-accessible metal (representing the “real-world” price), the FOT must be paid.

The fact that a greater proportion of the “real-world” price is thus represented by the premium, rather than the LME cash price, is problematic for both the market and the LME. In general, the market will hedge its exposure to metals prices by hedging the LME price. Although risk-management products do exist to hedge the premium, this is generally more expensive for users given the less liquid nature of the market. Accordingly, premium price discovery is generally conducted via survey pricing, which is viewed by certain segments of the market as less robust and reliable than the physical price discovery for the core LME contract<sup>8</sup>. Accordingly, the LME believes it is a valid target, in order to ensure the reliability and integrity of the LME’s price discovery arrangements and thus the orderliness of the market, that the

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<sup>8</sup> Although the LME offers a physically-settled regional premium contract for aluminium, this has yet to gain traction in the market.



proportion of the market premium caused by technical market factors (queues and Headline Warehousing Charges) and the changes in the level of that premium are reduced as much as possible, while respecting the fact that fundamental market factors (in particular, regional supply/demand imbalances) will validly give rise to regional premia.

- (c) The level of Headline Warehousing Charges also represents a key tool used by warehouse operators to attract metal being deposited by owners who then intend to sell that metal on the LME, and hence (as set out further above) are looking for the highest level of incentive. While it is clearly open to any warehouse operator to set their Headline Warehousing Charges at the rate they consider most appropriate, certain warehouse operators have commented that there exists a fundamental conflict between their desire to support the LME ecosystem (which would militate for lower, more cost reflective, Headline Warehousing Charges, given the arguments set out above) and their need to avoid losing market share to their peers (which would militate for higher Headline Warehousing Charges).

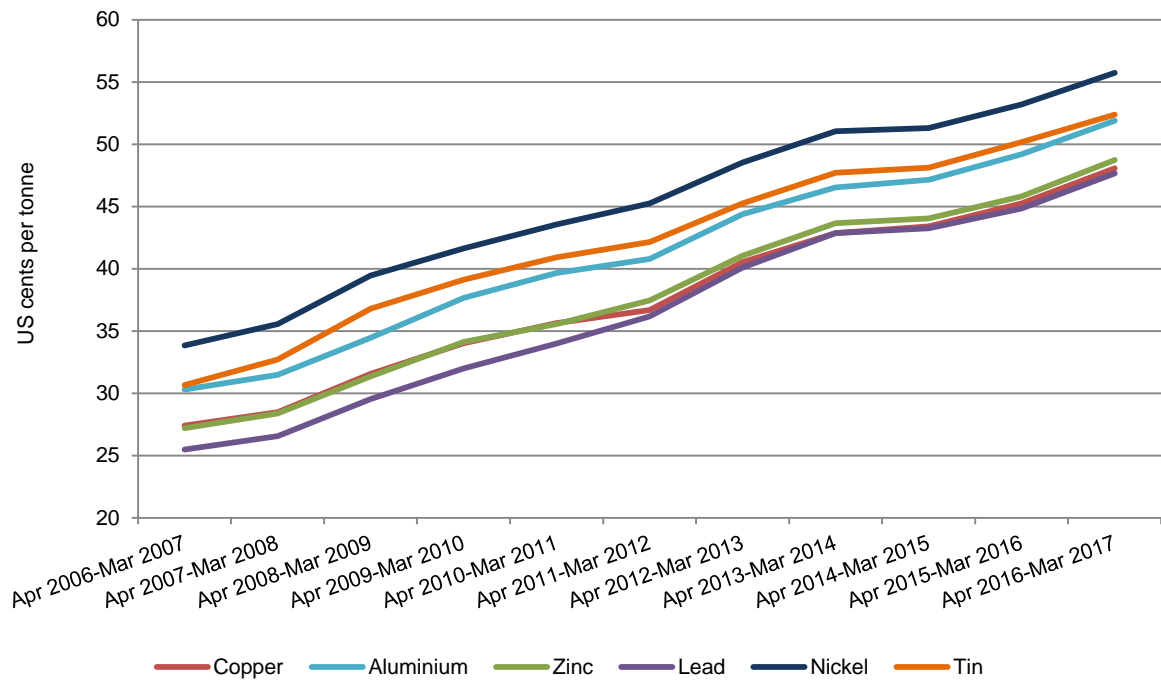
### **Historical development and analysis of Headline Warehousing Charges**

35. The LME has previously noted the incidence of high<sup>9</sup> Headline Warehousing Charges. In coming to the view that such rates are high, the LME has regard to three broad market observations:

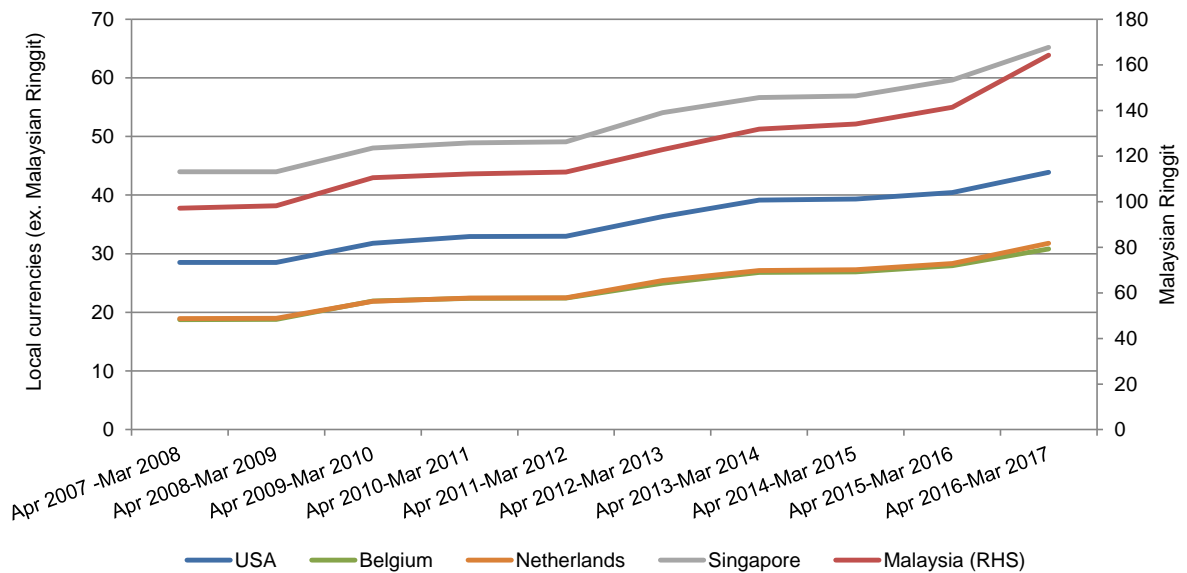
- (a) Year-on-year increases in the Headline Warehousing Charges. Over a number of years (and starting significantly before the emergence of queues at LME warehouses), such increases have been significantly above the rate of inflation. While it may be the case that, in a particular year, specific factors (such as the introduction of new rules by the LME) mandate higher rates of increase, the persistence of such increases over a period of several consecutive years suggests that Headline Warehousing Charges may be increasing at a faster rate than the underlying economic costs of providing the services to which they relate.

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<sup>9</sup> From this point, the Discussion Paper will use the term “high” to refer to Headline Warehousing Charges which have, in the view of the LME, diverged from the true economic cost of delivering the storage and logistical services to which these charges relate, and which may therefore be unfair to the customers on whom they are levied.



*Development of average rent per metal*



*Development of average FOT rate in certain key countries*

(b) Comparison between Headline Warehousing Charges and the rates charged to users on a bilaterally-negotiated basis. As set out further in paragraph 24(b), headline rates are generally only charged to metal owners who take



delivery of warrants through the LME settlement process. If a metal owner places metal on-warrant and looks to withdraw that metal themselves, it is generally possible to negotiate significantly-reduced levels of rent and FOT. This may suggest that the headline rates are deliberately set at a high level to target metal owners who do not enjoy the bargaining power to negotiate economically-rational rates. Warehouses have not historically been obligated to report such negotiated rates to the LME<sup>10</sup>, but the LME's anecdotal experience has been that there exists a material divergence between headline and discounted rates.

The LME notes that there may be additional factors which would naturally cause discounted pricing levels to be lower than Headline Warehousing Charges. In particular, "rent deals" typically require the metal owner to commit to storage for a given period of time, allowing the warehouse greater visibility over future cashflows, and (in common with most economic systems) commanding a discount in exchange for a commitment to longer-term usage of the service.

Additionally, discounted pricing levels are generally offered in exchange for the storage of a large quantity of metal by a single owner, whereas the Headline Warehousing Charges may relate to storage or withdrawal of as little as one lot of metal. However, the issue of scale is further complicated by the LME's warehousing rules, and in particular the forthcoming introduction of QBRC – in this context, certain warehouses have noted that the storage of too great a quantity of metal by a given operator in a given location may give rise to scale dis-synergies, in that a simultaneous cancellation of a large quantity of metal by a number of parties<sup>11</sup> may give rise to load-out queues which, under QBRC, would represent a loss of revenue for the warehouse operator. It could further be argued that discounted rate storage can avoid certain of these issues, as the warehouse operator will likely enjoy greater visibility as to when the metal will be withdrawn (e.g. at the end of the "rent-deal" period), and can plan accordingly in respect of other metal.

The position of the LME remains that it intentionally licenses a large number of Delivery Points, such that warehouse operators may establish LME warehousing activities in a number of different locations, and hence avoid the

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<sup>10</sup> An obligation of this nature took effect on 1 January 2016, and the first reports are due in April 2016.

<sup>11</sup> In the event of cancellation by a single party, or multiple parties acting in concert, the warehouse operator would be protected by the anti-abuse provisions of QBRC.





need for any one location to become so large that it risks losing economics under QBRC. Arguably this may act to increase charges for LME vs. off-LME storage, as further set out below.

- (c) Comparison between Headline Warehousing Charges and the cost of off-warrant storage. Again, there is no obligation for warehouses to report off-warrant charge levels to the LME, but the LME's anecdotal experience suggests a significant disparity in pricing between LME and off-warrant charges. While the LME accepts that the obligations associated with LME warranting are greater (for example, the requirement for LME reporting, indoor storage, maintenance of a London agent, payment of the LME stock levy, compliance with LME load-out rates, the forthcoming introduction of QBRC etc), the LME is not convinced that this would account for the scale of observed divergence between the two sets of prices.

- 36. For those reasons, the LME is concerned that charges may be unreasonably high, a factor which could affect the LME's assurance to the FCA that its warehousing arrangements are operating in a way that enable it to satisfy its regulatory obligations. As a result, and as part of the 2013 consultation results<sup>12</sup>, the LME committed to investigate potential solutions to high charges, including capping Headline Warehousing Charges ("Charge-Capping", or "CC")<sup>13</sup>.
- 37. To honour its commitment in the 2013 Consultation Results, the LME undertook a review of the scope of the LME's powers under competition law to cap Headline Warehousing Charges, and published the summary of this review as the Annex to the 2015 Discussion Paper.
- 38. Ultimately, the LME decided to adopt a "wait and see" approach to CC, reserving the right to implement the measure in the future should the structural issues caused by high Headline Warehousing Charges and incentives persist, rather than progressing with the implementation in the immediate term. This was in consideration of a number of factors, including (but not limited to): (a) the high level of litigation and investigation risk associated with such a measure and the potentially disruptive effect such litigation or investigation could have on the market; (b) the LME's recognition of the market preference for time to allow existing reform to take effect

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<sup>12</sup> See Notice 13/326 : A312 : W125 "Result of Consultation on Changes to LME Policy Regarding the Approval of Warehouses in Relation to Delivery Out Rates", 7 November 2013 (the "2013 Consultation Results Notice") and attached Consultation Report (the "2013 Consultation Report"), together the "2013 Consultation Results".

<sup>13</sup> The charge-capping approach was chosen for investigation since it had been the most common suggestion received to the 2013 Consultation as to how the problem of high Headline Warehousing Charges could be addressed. However, the LME has not yet reached a view as to whether charge-capping is the only approach capable of addressing this issue, as further set out in this Discussion Paper.





before assessing the need for further change; (c) recognition that warehouse operators had shown restraint in recent years when setting Headline Warehousing Charges (see paragraph 40); and (d) the LME's preference to allow its warehouse operators to set the rates for their businesses themselves.

39. Given the evolving market context outlined below, however, the LME now believes that it is appropriate to further explore its options to address high Headline Warehousing Charges.

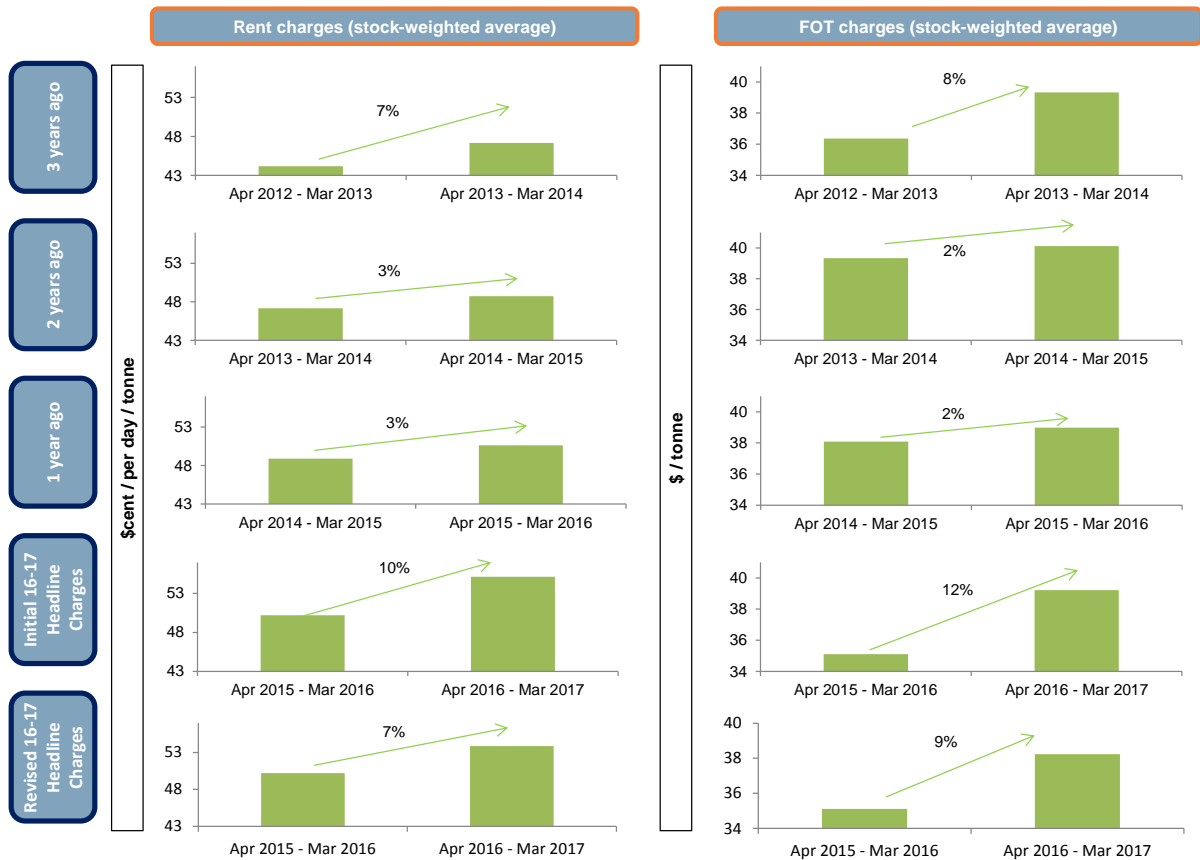
### **Recent developments in respect of Headline Warehousing Charges**

40. Headline Warehousing Charges have increased significantly in recent years. Charge increases from 2012-2013<sup>14</sup> to 2013-2014 were 7% for rent and 8% for FOT (computed as a stock-weighted average to accurately reflect the real financial implications<sup>15</sup>). Following a call for voluntary restraint in respect of rate rises from the LME, for 2013-2014 to 2014-2015 the rate rises decreased to 3% and 2% respectively. From 2014-2015 to 2015-2016 charge increases were again 3% and 2% respectively. Most recently, however, and as illustrated by the graphs below, the stock-weighted averages for Headline Warehousing Charges submitted for the 2016-2017 cycle were significantly higher than in respect of the previous two cycles, being 10% for rents and 12% for FOTs.

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<sup>14</sup> Years relate to rent cycles i.e. 1 April of the first year to 30 March of the second year.

<sup>15</sup> For more detailed notes on the calculation methodology, interested parties are referred to Notice 15/410 : A397 : W138 ("Rent and FOT charges 1 April 2016-31 March 2017", 30 December 2015, the "Initial 2016-2017 Charges Notice"). Note in particular that stock-weighted averages are recalculated each year based on updated stocks and exchange rates (in the case of FOTs), and hence restated levels may not be the same as the figure for the same period when analysed in the previous year.



*Stock-weighted rent and FOT increases over recent years<sup>12</sup>*

41. The LME has always noted (e.g. in paragraphs 46(e) and 111 of the 2015 Discussion Paper), that one effect of warehouse reform may be to cause warehouse operators to increase charges – and the LME does not dispute that certain of its rule changes do place greater burdens on warehouse operators.
42. However, in the view of the LME, the levels submitted by LME-listed warehouse operators for 2016-2017 did not appear to be based on objective economic factors, even considering that 2015 saw the implementation, or announcement of future implementation, of significant levels of reform to the LME warehouse network. While this would suggest that a greater-than-inflation charge increase would be justified, as set out in paragraph 35, the LME believes that Headline Warehousing Charges have been, for many years, high compared to all relevant market comparators. Accordingly, the impact of high percentage increases applied to already-inflated price levels suggests that the absolute Headline Warehousing Charges are disproportionately high. Although the LME employed its powers to query the economic rationale for such charges as set out in paragraph 21 above, this did not



materially change the nature of the submissions, which were eventually published in the Initial 2016-2017 Charges Notice.

43. The level of increase caused concern for metal owners, and specifically those owners buying metal on the LME market, and hence more likely to pay the Headline Warehousing Charges stipulated by the warehouse. In particular, metal owners subjected to load-out queues (and hence compelled to pay daily rent while waiting to withdraw metal from the warehouse) were particularly aggrieved, although the LME would note that the introduction of QBRC will provide offsetting relief to a number of such metal owners. However, metal owners with load-out slots scheduled after the introduction of the new charges (1 April 2016) and before the offsetting impact of QBRC (broadly during June 2016) would indeed be subjected to a greater level of charges.
44. Furthermore, certain warehouses commented specifically on the disparity in charge levels submitted for the 2016-2017 rent cycle. In particular, certain warehouses were of the opinion that they had demonstrated restraint in the setting of charges, and that the fact that others had not done so had placed those showing restraint at a competitive disadvantage. While it is clearly for each warehouse operator to arrive independently at the assessment of appropriate charges, there exist significant perverse incentives in that those operators submitting the highest levels of charge increase (even if not objectively justified by economic factors) will enjoy a competitive advantage in terms of the ability to pay incentives and source metal, as further set out in paragraph 29 above.
45. As a result, the LME believed that these extraordinary circumstances justified action, and announced<sup>16</sup> that the LME would re-open the Headline Warehousing Charges submission window for a two week period for downward modifications to 2016-2017 charges only.
46. This two week period closed on 19 February 2015, and the LME was pleased to announce on 29 February 2016 in the Revised 2016-2017 Charges Notice that two warehouse companies had taken advantage of the opportunity to reduce their Headline Warehousing Charges for the 2016-2017 period.
47. However, the LME was clear in the 2016 Charge Window Re-Opening Notice and the Revised 2016-2017 Charges Notice that such a re-opening would be an exceptional one-off event given the extraordinary circumstances, and that it did not

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<sup>16</sup> Via Notice 16/044 : A043 : W012 ("Re-opening of rent and FOT rate window for downward modification", 5 February 2016, the "2016 Charge Window Re-Opening Notice").



intend to repeat this process should the problem arise in future years, due not only to the market uncertainty engendered by such a process, but additionally because this solution does not address the underlying problem, namely that the market will remain susceptible to this issue while the LME does not have broader powers in respect of this issue. The LME has no reason to assume that, in the absence of any substantial change, the market will not encounter the same, or similar problem, during the next and / or future rate setting cycles, a factor which could affect its ability to provide an orderly market. Furthermore, it is highly likely that the charge-setting process for the 2017-2018 rent year will be particularly impacted, since warehouse operators who feel disadvantaged by the disparity in paragraph 44 might submit large increases in order to avoid the possibility of again being “left behind”, thus further accentuating the “upwards spiral” set out in paragraph 29.

48. As a result, in the Revised 2016-2017 Charges Notice, the LME concluded that it would, at a minimum, explore the possibilities for implementing a longer term solution to high charges. In making this commitment, the LME was mindful of the widely-held market view that the LME warehousing network has been the subject of considerable reform activity, and that it would be preferable to avoid further reform, particularly until the impact of current reform can be fully assessed. Furthermore, the LME notes the argument that issues in respect of Headline Warehousing Charges may resolve themselves over the coming years as the effect of warehouse reform beds-in<sup>17</sup>. However, in the view of the LME, the market concerns expressed around the 2016-2017 charge-setting process necessitate at least the investigation of further action to address these issues.

**Discussion Point 1: Do you agree with the LME’s proposition that (i) Headline Warehousing Charges are out-of-line with the economic cost of providing the services to which those charges relate, and thus out of line with both off-warrant and discounted LME rates, (ii) that such charges may be unfair to customers of the market, (iii) that this may have an impact on the quality of LME pricing, and (iv) that the mechanism by which charges are set leads to the danger of an increasing degree of disparity?**

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<sup>17</sup> Although it should be noted that issues of high Headline Warehousing Charges have been a topic of LME market concern for a period of many years, and considerably predate the current warehousing reform initiatives.



## Existing LME powers

49. A number of market participants have queried whether the LME already enjoys, under the Warehouse Agreement, the power to address high Headline Warehousing Charges.
50. Specifically, participants have pointed to two sections of the Warehouse Agreement within the broad section dealing with the proper functioning of the market. Firstly, Clause 9.3.1, which states (emphasis added):

*9.3.1 Warehouses play an important role in the markets in which the Exchange operates by ensuring, amongst other things, that Contracts are sufficiently anchored to the price of the underlying metal and that settlements are orderly. Warehouses must not prevent the proper functioning of the market, including by doing anything which may directly or indirectly constrain the liquidity and elasticity of stocks of metal under Warrant. In consequence, **Warehouses must not, without limitation, (i) give Inducements that in the ordinary course may reasonably be considered to be exceptional, (ii) impose charges for depositing or withdrawing metals that in the ordinary course may reasonably be considered to be unreasonable, or (iii) delay unreasonably the receipt or despatch of metal, (save where unavoidable due to Force Majeure), where such behaviour may have, directly or indirectly, a manipulative, distortive or disorderly effect on the market.** In the event that the Exchange considers that the conduct of a Warehouse indicates circumstances which may constitute Market Abuse, it is required to report this to the Financial Conduct Authority.*

and Clause 9.3.2<sup>18</sup>, which states:

*All Warehouses must periodically supply to the Exchange information relating to all Inducements paid to, or received from, third parties, and charges levied, for example, those for loading and unloading metal for Warrant purposes; in the form, and at the times, specified by the Exchange and set out on the Exchange's website from time to time. Further, a Warehouse must supply such information or clarifications on such information on request by the Exchange.*

51. It is argued that Clause 9.3.2 will provide the LME with evidence that discounted rates are being provided to metal owners, and that certain warehouses' Headline Warehousing Charges are so far out-of-line (both with observed discounted rates, but also with the Headline Warehousing Charges of peers) as to trigger the relevant

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<sup>18</sup> Note that this power only took effect on 1 January 2016, and reports will only be made for the first time in April 2016.



test in Clause 9.3.1. If this interpretation is followed, then these clauses would arguably render further rule change unnecessary, and they should be used by the LME to address (for example) the levels of rent increase submitted by certain warehouse operators for the 2016-2017 rent cycle.

52. The LME, while recognising this argument, is concerned that:
- (a) relying solely upon Clause 9.3.1 as a potential remedy would likely not provide a timely resolution to the issue of unfair charges, as the matter may not be resolved until any disciplinary process was concluded, as well as any potential challenge to a decision made by the LME. By the time any decision was reached the charges in question could be obsolete along with the precedential value of any decision made with regards to them; and
  - (b) any decisions made by the LME using Clause 9.3.1 would not necessarily provide a precedent for application to other warehouses. Investigations are confidential in nature and any decision made would arguably be dependent on the prevailing facts and law at the time. This could potentially lead to differing outcomes for different warehouses and a lack of certainty and visibility for the market on the appropriate level of charges.
53. While noting that there are instances where Clause 9.3.1 may be appropriately used to address unreasonable charges levied by multiple warehouses, the LME believes that Clause 9.3.1 is generally more appropriately used to address instances of individual warehouses levying unreasonable charges, rather than it being used as a mechanism for effecting changes intended to have wider application in the market. Furthermore, the LME believes that it would be preferable, where possible, to include clear and unequivocal guidance as to the levels of acceptable charges, or otherwise introduce rules which give as much certainty to the market as possible as to what is permissible and what is not.
54. However, the LME accepts that other participants may not agree with this position, and as such, welcomes the views of the market as to whether these powers provide an appropriate remedy to the issue at hand.

**Discussion Point 2: Do you believe that the LME already holds, under the existing LME Warehouse Agreement, sufficient powers to address the issue of high Headline Warehousing Charges?**



## Elements of this Discussion Paper

55. If it is believed that (i) there exists an issue with high Headline Warehousing Charges, and (ii) that the LME does not currently have sufficient powers to address such an issue<sup>19</sup>, then the arguments set out above suggest that it is reasonable and rational for the LME to investigate its options for structural reform.
56. From an economic theory perspective, the key issues which appear to drive potential unfairness are as follows:
- (a) A lack of charge-bargaining power on the part of certain market users, and in particular those users who have taken warrants through LME market delivery. The bargaining power of such a user is broadly limited to a potential to achieve slightly better rates of rent if committing to leave the metal in the warehouse for a given period of time – but such an agreement is likely only attractive to the metal owner because of the high costs of loading-out the metal (in terms of FOT payment) and finding truly low-cost storage; and/or
  - (b) Potential discriminatory behaviour in terms of prices and conditions offered to the “front-book” (high incentives or discounts offered to metal owners loading-in metal to warehouses) and the “back-book” (warrant holders)<sup>20</sup>; and/or
  - (c) A lack of price transparency, in that the Headline Warehousing Charges (i.e. the back-book charges) are published, while discounted rates and/or incentives (i.e. the front-book charges) are negotiated bilaterally and not published, even at an aggregate level.
57. Given the proposition above that the LME system provides an economic incentive for the high level and continued upward movement of Headline Warehousing Charges, it stands broadly to reason that there exist two alternative routes to address this issue:
- (a) Modify the LME ecosystem such that the economic rationale for high charges and upward movement is broken. This would most likely involve enhanced

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<sup>19</sup> The LME’s preliminary belief is that both of these propositions are true, but welcomes other views pursuant to Discussion Items 1 and 2.

<sup>20</sup> Here, ‘front-book’ and ‘back-book’ are used to describe different customer segments where dynamics of competition differ. Warehouses compete fiercely to win new customers to load into their warehouse – to write new front-book business. A customer that takes ownership of metal already in the warehouse, however, is part of the warehouse’s existing or ‘back-book’ of business and typically gets given different terms.



rights and/or protections for those in the back-book (i.e. takers of warrants through the LME settlement process), hence providing them with greater charge-bargaining power (supported by better price transparency into front-book pricing), and reducing the discrimination they currently face compared to front-book customers; or

- (b) Accept that the economic incentive exists, but impose some form of exogenous limitation on the level of Headline Warehousing Charges. This would address discriminatory back-book charging by specifically limiting such charges to a level which was fair and reasonable (and closer to those offered to front-book customers).

58. This Discussion Paper puts forward a number of discussion items on which the LME wishes to test the views of the market (the “Discussion Items”). All the Discussion Items are possible adjuncts to existing reform, and relate to the issue under discussion; namely, potential amendments to the LME network designed to address structural issues around high Headline Warehousing Charges. The Discussion Items are as follows, with the first four belonging to group (b) in paragraph 57 above, and the last belonging to group (a).

- (a) Introduction of fixed term warehouse agreements (“FTAs”) – converting the LME Warehouse Agreement from an “in perpetuity” model to a “fixed term” model, with particular focus on warehouses’ Headline Warehousing Charges when renewing LME-listed warehouse status;
- (b) Charge-capping (“CC”) – implementing a rule limiting Headline Warehousing Charges;
- (c) Charge Threshold Guidance (“CTG”) – publishing, in respect of Headline Warehousing Charges, thresholds or “shadow caps” as guidance;
- (d) Charge-based Incentive Guidance (“CBIG”) – monitoring Headline Warehousing Charges through the use of the LME’s powers in respect of incentive reporting and monitoring; and,
- (e) FOT Conversion (“FOTC”) – conversion of the LME contract from an “in-warehouse” contract (buyer pays FOT) to an “FOT-paid” contract (seller pays FOT).

59. In addition to the Discussion Items, there is one further item which does not meet the criteria laid out in paragraph 57, but on which the LME would also like to take the opportunity afforded by this Discussion Paper to elicit market feedback – that of the application of information barriers to all warehouse companies (“IB”). This is addressed in section 3E.





## The structure of Discussion Items

60. The analysis of the Discussion Items in this Notice mirrors the analytical framework set out in previous Notices (for example, the 2015 Discussion Paper Results Notice and the LORI and QBRC Implementation Notice). It is designed to facilitate the LME in assessing the options in a proportionate and objective manner. This Notice sets out the context for this discussion, as well as the LME's analysis of the Discussion Items as follows:

**X.1.** Potential construction of the Discussion Item.

**X.2.** Does the Discussion Item seek to achieve a regulatory, prudential or organisational objective?

**X.3.** Is the Discussion Item likely to have an effect on competition (noting that, for each proposal, even if it is likely to have an effect on competition, it may still be justifiable and proportionate)?

**X.4.** Does the Discussion Item comply with the principle of proportionality? In particular:

- (a) Is the Discussion Item capable of meeting the relevant objectives?
- (b) What are the most pertinent arguments for the Discussion Item?
- (c) What are the most pertinent arguments against the Discussion Item?
- (d) Are there any other, less restrictive means of achieving the same objective(s)?
- (e) Would the negative effects of the Discussion Item be too great to justify implementation?

## **SECTION 2: KEY CONSIDERATIONS IN RESPECT OF THE DISCUSSION ITEMS**

61. Given the preliminary LME view that Headline Warehousing Charges are out-of-line with the economic cost of providing those services, the natural task is then – were the LME to take policy action to counter this issue – to identify the most appropriate methodology for assessing the appropriate level of Headline Warehousing Charges which the LME should wish to see in the market, and how should these practically be quantified.

62. This is an issue which applies to all solutions in group (b) of paragraph 5757 above, which accept that the economic system of LME warehousing acts to drive up Headline Warehousing Charges, and that some form of exogenous downward



pressure should therefore be applied in order to counter this effect. While not presupposing that a direct charge cap is the correct policy action, any solution falling into this bucket will need to at least to be monitored in respect of its policy goals and effectiveness, by identifying an appropriate maximum level of Headline Warehousing Charges.

#### *Appropriate maximum levels of Headline Warehousing Charges*

63. In the view of the LME, the appropriate maximum level of Headline Warehousing Charges is best considered by reference to the discounted cost of storing metal on the LME on a bilateral basis, on the grounds that this represents a price at which a warehouse operator is prepared to offer its services (presumably including an appropriate profit margin), and accepting that there may be certain additional discounts for bilateral agreements as further set out in paragraph 35 above<sup>21</sup>. In this way, the frictional costs of the back-book (broadly, those paying Headline Warehousing Charges) are linked to the frictional costs of the front-book (broadly, those paying bilaterally-negotiated charges). For the next section, the following defined terms will be used:

“Current Headline Warehousing Charges”	Warehouse charges as submitted by LME-listed warehouse operators for either the 2015-2016 or 2016-2017 rent cycle (considerations in respect of which are outlined in paragraph 76) <sup>22</sup> .
“Bilateral Warehousing Charges”	Discounted cost of storing metal on the LME, negotiated on a bilateral and case-by-case basis between a particular operator and metal owner on the grounds that this represents a price at which a warehouse operator is prepared to offer its services.
“Current Bilateral Warehousing Charges”	The Bilateral Warehousing Charges levied during either the 2015-2016 or 2016-2017 rent cycle (considerations in respect of which are outlined in paragraph 76).
“Worst-Case Bilateral Warehousing Charges”	Allowing that each warehouse operation is unique in terms of cost structure (fixed and variable) and revenue structure (product mix and metal sourcing strategy), Worst-Case Bilateral

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<sup>21</sup> Although the LME is also happy to consider market feedback in respect of whether off-warrant rates would be a more appropriate reference point for maximum level of Headline Warehousing Charges.

<sup>22</sup> Clearly the Current Headline Warehousing Charges are directly observable, while the Current Bilateral Warehousing Charges are not – methods for observing the Current Bilateral Warehousing Charges are set out further below. Additionally, further details in respect of both the Current Headline Warehousing Charges and the Current Bilateral Warehousing Charges are also set out below.



	Warehousing Charges are charges which ensure a sufficiently wide “channel” such that every warehouse operator can achieve a viable business model <sup>23</sup> comfortably within the potential constraints of a specified maximum level.
“Current Worst-Case Bilateral Warehousing Charges”	The Worst-Case Bilateral Warehousing Charges levied during either the 2015-2016 or 2016-2017 rent cycle (considerations in respect of which are outlined in paragraph 76).
“Future Worst-Case Bilateral Warehousing Charges”	Worst-case Bilateral Warehousing Charges as anticipated at a point in the future, given the expectation that bilaterally-negotiated charges will also change on an annual basis.
“Target Future Maximum Headline Warehousing Charges”	The figures, published by the LME, being the highest levels of Headline Warehousing Charges which the LME considers to be economically justifiable, on the basis of fair and reasonable treatment of customers, under a reform scenario (likely to relate to the 2017-2018 rent cycle at the earliest).

*LME defined terms for charges*

64. It must be noted, however, that Bilateral Warehousing Charges are negotiated on a case-by-case basis between a particular operator and metal owner, while a defined appropriate maximum level of Headline Warehousing Charges must apply more generally. Just because a given operator is able to provide services to a given client at a given rate, does not mean this should be proposed as a maximum – each warehouse operation is unique in terms of cost structure (fixed and variable) and revenue structure (product mix and metal sourcing strategy). It would therefore be crucial, in determining an appropriate maximum level of Headline Warehousing Charges, to ensure a sufficiently wide “channel” such that every warehouse operator can achieve a viable business model<sup>24</sup> comfortably within the potential constraints of a specified maximum level (the “Worst-Case Bilateral Warehousing Charges”)<sup>25</sup>.

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<sup>23</sup> This is not to suggest that a warehouse operator is entitled to a “viable business model”, or that the normal market forces of competition should not force less efficient operators out of the market. As set out more fully in paragraph 31 above, the LME does not believe that the market competes on the basis of Headline Warehousing Charges – and so, even if all operators set their Headline Warehousing Charges at the maximum Headline Warehousing Charges, it will not necessarily be the case that all operators will enjoy a profit margin. This is because operators will still need to provide discounts under paragraph 24(a), and incentives under paragraph 24(b).

<sup>24</sup> This is not to suggest that a warehouse operator is entitled to a “viable business model”, or that the normal market forces of competition should not force less efficient operators out of the market. As set out more fully in paragraph 31 above, the LME does not believe that the market competes on the basis of Headline Warehousing Charges – and so, even if all operators set



65. An additional complexity arises in that warehouse operators would argue that their headline FOT rates relate not just to the costs of loading out the metal, but also incorporate some element of charges which they have foregone in respect of other charges during the lifecycle of that metal in the warehouse. The most commonly-cited example is in respect of load-in charges, which generally are not charged in respect of LME-warranted material. In this sense, the structure can be viewed as an extension of the principle in paragraph 24(b), namely a structuring of metal depositing such that economics are delivered to the depositor (in the form of no charges for deposit, plus potentially a cash incentive) at the expense of the subsequent buyer of the warrant (who funds both incentive and foregone logistical load-in fees via the FOT charge). Accordingly, warehouses would be expected to argue that their allowable FOT charges should include “rolled-up” costs for foregone fees such as load-in.
66. In general, however, the LME does not believe that it is inherently desirable for economics to be redistributed between market participants in this manner, and hence does not at present consider this point in itself to provide a reason to accept higher rent and FOT charges.
67. In considering appropriate maximum levels of Headline Warehouse Charges, a key task is to identify the Target Future Maximum Headline Warehousing Charges under a reform scenario<sup>26</sup>. It is assumed that, over time, bilaterally-negotiated charges will also change, and so in each future year, the correct comparison will be between the Target Future Maximum Headline Warehousing Charges, and the Future Worst-Case Bilateral Warehousing Charges<sup>27</sup>.
68. The LME has identified four key alternative methodologies for deriving the Target Future Maximum Headline Warehousing Charges, as follows:

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their Headline Warehousing Charges at the maximum Headline Warehousing Charges, it will not necessarily be the case that all operators will enjoy a profit margin. This is because operators will still need to provide discounts under paragraph 24(a), and incentives under paragraph 24(b).

<sup>25</sup> The use of the term “Worst-Case” should not be taken to imply that the Worst-Case Bilateral Warehousing Charges are simply the maxima of all observed Bilateral Warehousing Charges – rather, they are the highest level which an economically-rational warehouse should look to charge in a competitive environment. Outlier bilateral transactions (with or without the intention of impacting the calculation of Headline Warehousing Charges) will not be the determinative factor in this regard.

<sup>26</sup> Given the timing required to bring in any new rules, it is assumed that the first rent year to which the Target Future Headline Warehousing Charges will apply is 2017-2018.

<sup>27</sup> It would also be possible to simply state the general principle that a link should exist between Bilateral Warehousing Charges and Headline Warehousing Charges (i.e. linking the rights of the back-book to those of the front-book), and making it a disciplinary offence for warehouses to not observe such linkage, without specifying quantitative thresholds for the result Headline Warehousing Charges. However, the LME does not believe that the investigation and enforcement of a generally-stated rule of this nature is desirable from the perspective of market orderliness.



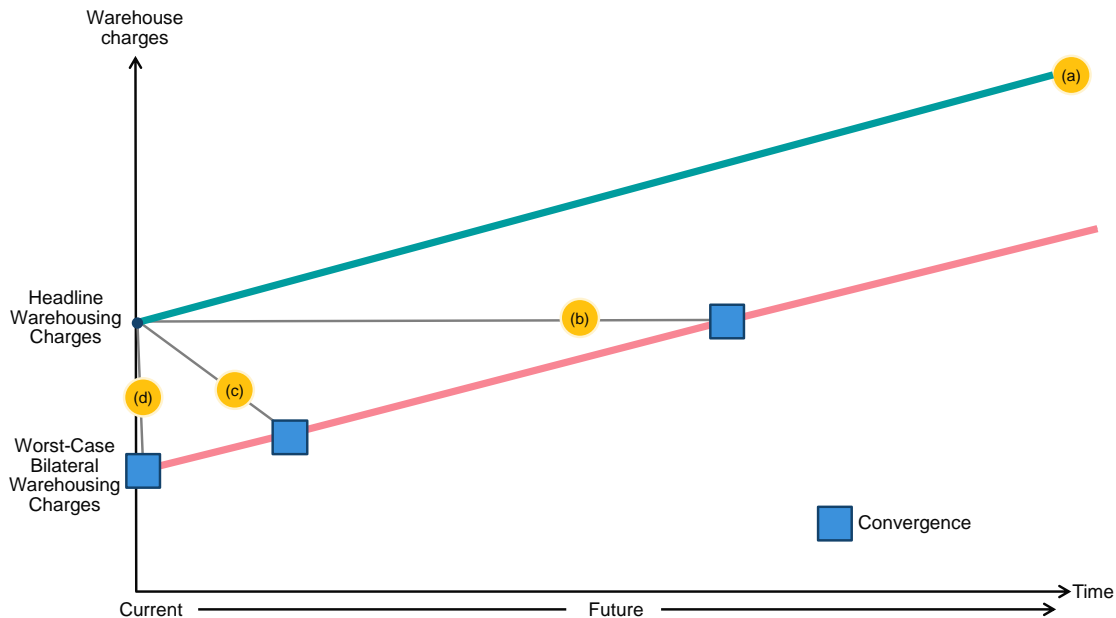
- (a) **Inflationary adjustment:** Start with the Current Headline Warehousing Charges, and derive the Target Future Maximum Headline Warehousing Charges by applying a rate of increase equal to the increase in the Future Worst-Case Bilateral Warehousing Charges. It may be appropriate, given the difficulty of directly observing the Future Worst-Case Bilateral Warehousing Charges (as further considered below), to apply as a proxy an inflationary index, plus potentially an additional allowance in the event that future LME rule changes add an additional burden on warehouse operators.

This approach would limit the excessively high increases in Headline Warehousing Charges which have been seen in recent years, and would keep broadly static the gap between the Future Maximum Headline Warehousing Charges and the Future Worst-Case Bilateral Warehousing Charges. However, it would do nothing to reduce this delta, which in the preliminary view of the LME is already substantial.

- (b) **Charge freeze:** Freeze the Current Headline Warehousing Charges at existing levels to derive the Target Future Maximum Headline Warehousing Charges. Over a period of time, the Future Worst-Case Bilateral Warehousing Charges would be expected to rise due to inflation and potential other factors, and this would ensure a reducing divergence, and eventually convergence, between the Target Future Maximum Headline Warehousing Charges and the Future Worst-Case Bilateral Warehousing Charges. Once convergence had been achieved, the Target Future Maximum Headline Warehousing Charges would be allowed to increase year-on-year pursuant to the methodology in approach (a).
- (c) **Transitional floor:** Take the Current Headline Warehousing Charges, and impose a “transitional floor” rate of reduction: the Target Future Maximum Headline Warehousing Charges would be reduced by a given year-on-year percentage (for example, 5%) on an annual basis, until such time as they converged with the Future Worst-Case Bilateral Warehousing Charges. Once convergence had been achieved, the Target Future Maximum Headline Warehousing Charges would be allowed to increase year-on-year pursuant to the methodology in approach (a).
- (d) **Immediate rate reduction:** The 2017-2018 Target Future Maximum Headline Warehousing Charges would be set to the corresponding Future Worst-Case Bilateral Warehousing Charges, representing a significant immediate reduction in the Headline Warehousing Charges, and achieving immediate convergence. Subsequently, the Target Future Maximum



Headline Warehousing Charges would be allowed to increase year-on-year pursuant to the methodology in approach (a).



*Graphical illustration of potential development of Target Future Maximum Headline Warehousing Charges*

69. The four routes outlined above constitute a spectrum, trading-off the rate at which Target Future Maximum Headline Warehousing Charges converge to Future Worst-Case Bilateral Warehousing Charges (which, by the arguments outlined earlier in this Discussion Paper, will bring benefits to the LME market) against the disruption caused by a significant change in the Headline Warehousing Charges environment. Most significant in this respect is the fact that warehouse operators will have historically paid incentives based on an expectation of future FOT (and, to a lesser extent, rent) collection – and the level of such payment will have been predicated on the levels of Headline Warehousing Charges in effect at the time of the payment of the up-front incentive. While the LME does not here take a position on the legitimacy of any expectation by warehouse operators that they will be able to recoup incentives paid notwithstanding the potential for future rule changes, any proposal which reallocates economics between market participants (in this case, from warehouse operators to metal owners) does influence the LME’s assessment of associated risk of disruptive (even if ultimately unsuccessful) legal challenges (the LME’s assumption being that, the more severe the impact of a proposal on a section of the market, the more likely it is that a participant from that section of the market might launch a legal challenge, irrespective of the merits of such challenge).



70. Under approach (d) above, it would be expected that such warehouse operators would be in danger of losing money, given that the Headline Warehousing Charges at the time of withdrawal of the metal would be lower than had been expected. In particular, if metal owners expect the rate of FOT to fall due to the introduction of policy action by the LME, then they will be more likely to wait for those FOTs to reduce before cancelling their metal, and hence paying the lower rate of FOT, which may cause the warehouse to lose some of the money invested in the incentive in respect of that metal.
71. Under approach (c), i.e. the use of a transitional floor, it may be possible to calibrate the rate of downward transition to mitigate the incentive for warrant holders to delay withdrawal and pay lower FOT. If the absolute decrease of maximum FOT between year N and year N+1 were less than the rent charged during the course of that year (at the maximum rent rate for year N), then a metal owner waiting until year N+1 in order to cancel metal at the lower rate of FOT would arguably have repaid the warehouse for its “loss” in respect of the storage of the metal during the intervening year. Of course, the warehouse may have assumed in its incentive modelling that the metal would have rested in any event in the warehouse for a given period of time, and so the precise economics will be case-specific – but in general, this approach would be expected to respect the warehouses’ desire to recoup incentives paid.
72. Under approaches (a) or (b), it is generally expected that warehouses would not lose money in respect of incentives paid, because the LME understands that warehouses generally do not write incentives which are economically predicated on future years’ increases in charges. Again, however, this will be case-specific.
73. This question is, in the view of the LME, a key factor in respect of any solutions in group (b) of paragraph 57 above – and, in particular, the likelihood of challenge in respect of such solutions. Accordingly, the views of the market on this question are specifically welcomed.
74. A final point is whether it is necessary to cap all Headline Warehousing Charges (i.e. both rents and FOTs), or just FOTs. As set out in paragraph 25, the FOT is arguably the greater ill in the market, because it acts to “lock-in” high rents, as the barrier to exit a warehouse (and hence avoid high rents) is higher. If FOTs were lower, then warehouses charging high rents would see an outflow of metal as owners sought more cost-effective storage – and so an argument can be advanced that, if FOTs were at more reasonable rates, then action against high rents would not be necessary. Additionally, it may be easier to identify the cost-reflective charge associated with FOT (as opposed to rent), and it is good regulatory practice to limit





regulation of charges to those elements where companies enjoy market power. However, this would depend to a large extent on the approach chosen under paragraph 68 – approaches (a) and (b), for example, would not achieve a near-term reduction in FOTs sufficient to remove the barrier effect set out above.

**Discussion Point 3: Do you have a perspective on (i) the appropriate maximum levels of Headline Warehousing Charges (options (a)-(d)), and (ii) the relative need to address levels of rent vs. levels of FOT?**

*Determination of Current Headline Warehousing Charges – per-operator or general, and choice of year*

75. Approaches (a), (b) and (c) in paragraph 68 all start from the Current Headline Warehousing Charges in operation. Accordingly, it will be important to define precisely what is meant by this term.
76. First is the question of which year's charges constitute the Current Headline Warehousing Charges. By the time of introduction of any reform arising from this Discussion Paper, the relevant charge year will be 2016-2017. However, when announcing the 2016-2017 charges in the Initial 2016-2017 Charges Notice, the LME specifically noted that the stock-weighted average increases of certain of these Headline Warehousing Charges were (in the view of the LME) too high, and warehouse operators were specifically cautioned in paragraph 8 of the Initial 2016-2017 Charges Notice as follows:

*“Warehouses are reminded that, if CC<sup>28</sup> were to be implemented in future, the total revenue per unit of metal may be reduced compared to the current ratecard. Accordingly, warehouses should consider the advisability of paying incentives during 2016-17 on the basis of the full level of 2016-17 rents and FOTs, given the possibility that such rates may fall under a potential future implementation of CC”.*

Accordingly, the LME believes that there exists a strong argument to use the 2015-2016 Headline Warehousing Charges as the basis for the calculations in approaches (a), (b) and (c) of paragraph 68.

77. A second question arises in respect of whether the Current Headline Warehousing Charges should be per-warehouse, or across warehouses (for example, on a per Delivery Point, regional or global basis). Looking at (for example) the 2015-2016

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<sup>28</sup> Charge-capping being the route for potentially addressing high Headline Warehousing Charges which had previously been discussed with the market – but the warning is applicable to the other Discussion Items as well.





Headline Warehousing Charges, there exists considerable variance between operators. Considering e.g. approach (b) in paragraph 68, it would be possible to either (i) require a warehouse to maintain the levels which it itself set in 2015-2016 as the Target Future Maximum Headline Warehousing Charges in respect of that warehouse, or (ii) to calculate maxima across the Current Headline Warehousing Charges at all warehouses, and apply these as the Target Future Maximum Headline Warehousing Charges across all warehouses. Although this could lead to higher Headline Warehouse Charges overall, the LME considers that these could well be lower than in the absence of policy action, as further outlined in paragraphs 94 and 95 below.

78. In the view of the LME, approach (i) could be viewed as inequitable, as a warehouse which had made a decision to set lower Headline Warehousing Charges for (in this example) 2015-2016 would then be “locked-in” to these levels going forwards, and suffer a potential competitive disadvantage, even though no suggestion was made at the time of setting 2015-2016 levels that they would apply to any period other than 2015-2016. However, it would carry the benefit of maintaining the current spread of charges observed between operators, rather than all prices “floating-up” to a maximum<sup>29</sup>.
79. For the remainder of this section, it is assumed for the purpose of illustrating further points that maximum 2015-2016 figures are used as the basis for Current Headline Warehousing Charges – but market feedback is welcomed on this question.

**Discussion Point 4: Do you have a perspective on the determination of Current Headline Warehousing Charges – per-operator or general, and choice of year?**

*Determination of Target Future Maximum Headline Warehousing Charges – location and metal granularity*

80. When determining Target Future Maximum Headline Warehousing Charges by any of the proposed methods set out above, it will be necessary to determine whether such charges should be set across the LME’s geographical network, or at a per-region, per-country or per-Delivery Point level. The LME’s view in this respect is that, even at the level of a Delivery Point, port-related specificities may mean that the economic drivers associated with providing storage and logistical services in one Delivery Point are significantly different to those in a different Delivery Point. Accordingly, the LME proposes that Target Future Maximum Headline Warehousing

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<sup>29</sup> Although, as set out later in this Discussion Paper, the LME would not view that as being evidential of a diminution of competition, given the LME’s assertion that the Headline Warehousing Charges are not the venue in which competition takes place.



Charges should be assessed at a per-Delivery Point level, and under approaches (a), (b) and (c) in paragraph 68, the relevant Current Headline Warehousing Charges for a particular Delivery Point should be assessed as the highest 2015-2016 Headline Warehousing Charges charged by any warehouse operator in that Delivery Point for the 2015-2016 rent year.

81. Similarly, it will be necessary to assess whether Target Future Maximum Headline Warehousing Charge should be per-metal, or across all metals. The LME believes that its different requirements for the storage of the various metals (for example, the additional security requirements in respect of nickel), and the fact that warehouses already set differential charges for storage, suggest that such granularity is required. Accordingly, the LME would propose that Target Future Maximum Headline Warehousing Charges are set with the same per-metal granularity as for the current charge-setting process, i.e. per-metal for rents, and FOTs split into (i) all metals except cobalt and roasted molybdenum concentrate, (ii) cobalt and (iii) roasted molybdenum concentrate<sup>30</sup>. Therefore, under approaches (a), (b) and (c) in paragraph 68, the relevant Current Headline Warehousing Charges for a particular Delivery Point should be assessed as the highest 2015-2016 Headline Warehousing Charges charged by any warehouse operator in that Delivery Point for a given metal for the 2015-2016 rent year.
82. For the remainder of this section, it is assumed for the purpose of illustrating further points that this is the case – but market feedback is welcomed on this question.

**Discussion Point 5: Do you have a perspective on the determination of Target Future Maximum Headline Warehousing Charges – location and metal granularity?**

*Determination of permissible increases in Target Future Headline Warehousing Charges*

83. Under all four approaches set out in paragraph 68, it will eventually be necessary to assess, on an annual basis, the permissible increases in Target Future Headline Warehousing Charges. For approach (a), this will be required in the first year of operation of any new rule. For approach (d), it will be required in the second year (given the first year will have seen the “resetting” of rates to the Bilateral Warehousing Charges). For approaches (b) and (c), this will be required once convergence with the Future Bilateral Warehousing Charges has been achieved.
84. There are, in the view of the LME, broadly four routes by which this can be achieved:

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<sup>30</sup> Rents and FOTs are also set separately for premium aluminium contracts – however, these contracts are constructed on a “seller-pays-FOT” basis, and so are not susceptible to the same problems as the main contracts, as further explored under the FOTC Discussion Item.



- (a) **Deterministic process by reference to exogeneous datapoints:** Under this approach, each year-on-year rate of increase for the Target Future Maximum Headline Warehousing Charges would be set by reference to a defined variable – most likely, the inflationary index most relevant to each Delivery Point. This would have the benefit of requiring no subjectivity in the process, but could hence not react to LME-specific items, such as rule changes which could reasonably be expected to increase the cost burden to warehouse operators of providing LME warranting services<sup>31</sup>. The approach would also rely on the successful identification of objective and relevant indices. Furthermore, such economic data is generally compiled on a backward-looking basis, and so would not incorporate expected future changes, which could perhaps be anticipated via a more subjective and less mechanistic process. To mitigate this, charges could be updated using an index value compiled in the year before the charging year, or via a forecast index value with a true-up for any variation in outturn relative to forecast.
- (b) **Deterministic process by reference to endogeneous datapoints:** Under this approach, the rate of increase for the Target Future Maximum Headline Warehousing Charges would be set by observation of the corresponding rate of increase in Future Bilateral Warehousing Charges. This would have the benefit of directly reflecting changes in the costs of delivering LME warranting services. However, the difficulty would be in observation – although the LME will (from April 2016) receive reporting<sup>32</sup> in respect of the rates charged for discounted LME metal warranting by warehouses, this data will by definition be out-of-date (reported by quarter, and in arrears), and so historical observations may not accurately reflect expected future developments.
- (c) **Consultant-led process:** Under this approach, a Charges Consultant would be appointed to identify, each year, the allowed annual increases in the Target Future Maximum Headline Warehousing Charges. This may be informed by inputs including inflationary data and observed Bilateral Warehousing Charges, but ultimately relying on the expert judgment of the

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<sup>31</sup> Although this option could combine a cost index alongside an “LME factor” to reflect any rule changes, as determined by the LME.

<sup>32</sup> It should also be noted that this information is provided on a confidential basis, and so an appropriate construct would have to be generated to ensure that the information could be used for the purpose outlined here, while still respecting warehouses’ reasonable expectations as to commercial confidentiality – for example, by appropriate aggregating and averaging. It may also be considered appropriate to expand the scope of the obligation on warehouse operators to provide data – for example, a requirement (as is common in the regulated utility sector) to submit a full cost structure to the LME in respect of rents and FOTs, possibly involving the use of an activity-based costing approach, such that the underlying costs of providing these services can be appropriately assessed – and an appropriate level of LME audit rights.



Charges Consultant whose decision would be binding for all parties, including the LME<sup>33</sup>. The benefit of this approach is that the determination would be performed by an expert with significant general expertise in matters of market pricing. The costs of the Charges Consultant would need to be borne by the LME ecosystem – most likely, in the form of an additional component of the warehouse stock levy, calibrated so as to raise sufficient funds to cover the costs of the Charges Consultant.

- (d) **LME-led process:** This approach would be similar to (c), except that the LME, rather than an external consultant, would be responsible for the assessment of the allowable increases in the Target Future Maximum Headline Warehousing Charges.

85. The publication of the outcome of this process would provide greater market transparency as further set out in paragraph 56(c)

**Discussion Point 6: Do you have a perspective on the determination of permissible increases in Target Future Headline Warehousing Charges?**

*Determination of rates of Worst-Case Bilateral Warehousing Charges*

86. Under approaches (b), (c) or (d) set out in paragraph 68, it will also be necessary to identify a mechanism to measure Worst-Case Bilateral Warehousing Charges. For approach (d), this will be required in the first year of any new rule, as the first year's Target Future Maximum Headline Warehousing Charges would need to be set to the Worst-Case Bilateral Warehousing Charges. For approaches (b) and (c), it is necessary to track the Future Worst-Case Bilateral Warehousing Charges to identify the point of convergence between the Headline Warehousing Charges and the Worst-Case Bilateral Warehousing Charges. However, even in approaches (b) and (c), the LME believes the maximum visibility can be provided to the market by immediately quantifying the Worst-Case Bilateral Warehousing Charges, and then tracking the Future Worst-Case Bilateral Warehousing Charges by applying the rate of increase of Headline Warehousing Charges (as derived per paragraph 84) to these charges.
87. The quantification of the absolute levels of Worst-Case Bilateral Warehousing Charges is more challenging than identifying the rate of increase. The options for the identification of Bilateral Warehousing Charges are broadly the same as set out in paragraph 84. However, given the greater complexity of this task, the

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<sup>33</sup> Subject to appeal.



deterministic approaches in options (a) and (b) are believed to be less appropriate. Accordingly, the LME expects that the absolute levels of Worst-Case Bilateral Warehousing Charges will need to be identified either by an external Charges Consultant, or by the LME itself.

88. This would then be calibrated against the reported Bilateral Warehousing Charges pursuant to the LME's information-gathering powers (potentially enhanced as set out in paragraph 84(b), in order to achieve a "sense-check" (accepting that the Worst-Case Bilateral Warehousing Charges would naturally be higher than the observed Bilateral Warehousing Charges). Such an approach would, in the view of the LME, provide an objective assessment of the Worst-Case Bilateral Warehousing Charges.
89. Again, the publication of the outcome of this process would provide greater market transparency as further set out in paragraph 56(c).

**Discussion Point 7: Do you have a perspective on the determination of Worst-Case Bilateral Warehousing Charges?**

*Potential impact of promulgating Target Future Maximum Headline Warehousing Charges*

90. If Target Future Maximum Headline Warehousing Charges are published to the market, and warehouses do (via whatever method chosen by the LME) choose to respect such maxima, then there exists a danger of all operators setting their particular Headline Warehousing Charges in each year simply to the Target Future Maximum Headline Warehousing Charges. This highlights the standard economic argument against the publication of maximum pricing – namely that the maximum levels act as a "signalling mechanism", and all market participants "float up" to the level of the cap, hence reducing competition in the marketplace.
91. As set out in paragraph 31, the LME does not believe that Headline Warehousing Charges represent the basis on which warehouses compete – and hence a convergence of Headline Warehousing Charges between competitors would not in any way suggest a lessening of competition either on discounted rates, or incentives paid.
92. Absolute levels of discounted storage rate would be expected to remain the same, since as set out in paragraph 24(a), discounted rates are generally offered by operators on the basis of their costs and desired profit margin, not a specific percentage reduction from the operators' Headline Warehousing Charges. While the percentage-terms decrease would optically reduce if Headline Warehousing



Charges were lower, the cost to customers of discounted storage would remain the same.

93. Although the absolute level of incentives paid would be expected to fall (given a lower pool of fees from which they could be funded if Headline Warehousing Charges were reduced, either immediately or over time), the LME does not believe that any metal owner has a “right” to the payment of a given level of incentive by a warehouse (particularly if that incentive is then funded by charges levied on subsequent owners of the metal). Furthermore, the competition between operators for the payment of incentives would be expected to remain fierce, but simply at a lower absolute level of payments.
94. Additionally, and particularly under options (a) and (b) in paragraph 68, it is possible that certain operators will increase their current rates under a new regime. Assuming that new rules are introduced in respect of the 2017-2018 rent year, then it is likely that operators would calibrate their 2017-2018 Headline Warehousing Charges at some level between their current 2016-2017 charges, and the Target Future Maximum Headline Warehousing Charges published for 2017-2018. To the extent that the 2017-2018 Target Future Maximum Headline Warehousing Charges are higher than the 2016-2017 Headline Warehousing Charges, the argument could be levelled that the effect of the policy action has been to “signal” to that operator that charges can be increased.
95. However, it is important in this context to ensure that comparisons are on the basis of a truly comparable time period. Per paragraph 47, the LME’s view at this stage is that – in the absence of policy action – the charge-setting cycle for the 2017-2018 rent year will feature very significant increases in charges. Accordingly, the correct comparison in the event that policy action were taken would be between (i) the observed Maximum Headline Warehousing Charges for 2017-2018 under the policy action (which may indeed exhibit increases against 2016-2017 charges), and (ii) the “counterfactual”, i.e. the expected 2017-2018 charges in the absence of policy action – which, in the view of the LME, would be very much higher than the Target Future Maximum Headline Warehousing Charges under any of the options in paragraph 68.
96. Furthermore, it should not be presupposed that all operators will choose to set their rates precisely at the level of the Target Future Maximum Headline Warehousing Charges. Consider, under the current charge-setting process, a warehouse operator looking to set rates for year N+1 in a given Delivery Point. That operator has the benefit of seeing the charges currently in effect for year N. In particular, that operator can see the highest charge ( $C_{max}$ ) currently levied by a competitor in year N in the specified Delivery Point. The operator will further realise that charges are very



rarely reduced by any LME market actor – and so the operator will have a strong degree of confidence that a competitor will charge a rate at least equal to  $C_{\max}$  in year N+1, i.e. there exists a signalling mechanism in respect of  $C_{\max}$  being an “acceptable” charge for year N+1.

97. By this argument, the operator (and all other operators in the port who were not currently levying the highest charge in year N) would naturally set the year N+1 rate to at least  $C_{\max}$ . But in practice, this is not observed – although all operators exhibit an upward trend in Headline Warehousing Charges over time, there is not an automatic effect of float-up to a signalled value – as set out in paragraph 32, warehouse-specific factors still give rise to a spread of Headline Warehousing Charges.
98. However, in the final analysis, the LME continues to hold the view that (i) a spread of Headline Warehousing Charges does not represent a competitive market, given that competition occurs elsewhere in the economic system, and (ii) the market benefits of reducing the highest level of Headline Warehousing Charges (which, in practice, are those paid by customers receiving LME warrants in settlement, given the “worst warrant” effect) significantly outweigh the (very limited and primarily optical) potential downside of a reduced spread in Headline Warehousing Charges.

**Discussion Point 8: Do you believe that a “convergence” of operators’ Headline Warehousing Charges to published Target Future Maximum Headline Warehousing Charges would represent a diminution in competition?**

**Discussion Point 9: Do you believe there are other key considerations which the LME should consider in the context of this section?**

### **SECTION 3: ANALYSIS OF THE DISCUSSION ITEMS**

#### **A. CONVERSION TO A FIXED TERM WAREHOUSE AGREEMENT (“FTA”)**

##### *A.1. Potential construction of FTA*

99. The LME warehouse network is governed by the Warehouse Agreement signed by both the LME and the warehouse operator. As present, this contract continues in perpetuity, unless terminated by either the LME or the warehouse operator.
100. FTA could work by incorporating into the Warehouse Agreement a clause by which each warehouse operator would only retain their LME listing subject to an annual or biennial review of each of the Delivery Points in which that warehouse company





operates. The review could address any issue arising during the previous term, including the development of any queues and causes thereof, the payment of incentives and the setting of Headline Warehousing Charges during the annual rate setting process (indeed, the rate setting process could be incorporated within the review process). The LME anticipates that it would need to provide clear and detailed guidelines as to the parameters on which this review would be conducted.

101. Should a warehouse operator fail to pass such a review, the LME would have the power to terminate the agreement and would need to provide granularity on the basis on which it had decided to terminate. After due notice had been issued to the market, the warehouse operator would be responsible for, and bear the cost of, loading-out all the metal in that Delivery Point to another LME-listed warehouse.
102. A warehouse operator would not be permitted to reapply for a licence in that Delivery Point for a period to be determined subsequent to the revocation of the previous licence. Reapplication would be subject to that warehouse operator having maintained their licences in any other Delivery Point in which they operate as an LME-listed warehouse.
103. Although the FTA regime could be used to ensure the appropriate behaviour of the warehouse operator in a number of respects, the LME does not generally believe that standards of service are below the expectation level of the market – and, if this were to occur, the LME believes that it enjoys sufficiently broad powers under the Warehouse Agreement to compel compliance without delisting, or to undertake *ad hoc* delisting as a last resort<sup>34</sup>. Accordingly, it would seem likely that the only substantive issue addressed in the context of the FTA review would be the level of Headline Warehousing Charges set by the warehouse in question.
104. If the LME wished to have the power to refuse reauthorisation on the basis of high Headline Warehousing Charges, and in order to act in a fair and rational way, the LME believes it would need to publish a schedule of maximum Headline Warehousing Charges, above which the warehouse operator would be at risk of being refused reauthorisation in respect of the warehouse in question. This maximum Headline Warehousing Charges schedule would be set on the basis of the considerations and process set out in Section 2 of this Discussion Paper.

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<sup>34</sup> Indeed, the LME already retains within the Warehouse Agreement the right to terminate the Warehouse Agreement with a licensed operator on six months' notice.





**A.2. Does FTA seek to achieve a regulatory, prudential or organisational objective?**

105. FTA could potential promote good practice amongst warehouses companies as it would be a necessity in order to pass the review process. However, as set out above, the key effect would likely be in respect of Headline Warehousing Charges, given that other items are broadly addressed by the LME's existing rules and powers. If express standards were published in respect of maximum Headline Warehousing Charges, then the effect of FTA could be to reduce the incidence of high levels of Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34, which in the view of the LME represents a key regulatory deliverable in the context of the LME market.

**A.3. Is FTA likely to have an effect on competition?**

106. To the extent that FTA results in warehouse operators observing a set of maximum Headline Warehousing Charges, it is possible that Headline Warehousing Charges will broadly "float up" to, or near to, the maximum rates, and that the maximum Headline Warehousing Charges could act as a "signalling mechanism" by which warehouse simply set their Headline Warehousing Charges at, or near, the maximum levels.
107. As set out in paragraph 91, the LME does not view this as a concern in respect of market competitiveness, given that competition takes place at a different level of the economic system. Accordingly, the LME does not expect that FTA would have an effect on competition.

**A.4. Does FTA comply with the principle of proportionality?**

*(a) Is an FTA capable of achieving the relevant objectives?*

108. To the extent that warehouse operators heed the LME's powers not to reauthorise particular warehouses, then FTA is capable of achieving the relevant objective. However, the danger exists that warehouses choose to maintain high levels of Headline Warehousing Charges, and simply challenge the LME's powers not to reauthorise. Particularly if the warehouse in question holds significant quantities of metal, the disruptive impact on the LME market may outweigh the benefit of non-reauthorisation, and FTA may not achieve its goals.



*(b) Most pertinent arguments for FTA*

109. FTA may achieve the LME's stated aim of addressing high Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34. In particular, the LME believes that most warehouse operators wish to play their part in promoting an orderly and efficient market, and would be expected to respect the Target Future Maximum Headline Warehousing Charges promulgated under FTA, and indeed welcome the guidance and clarity thus delivered to the market.
110. Introducing FTA to the LME's current warehouse system could positively impact the orderly functioning of the LME's market in other ways by encouraging restraint and best practice. It would also place the onus of responsibility on warehouse operators, allowing autonomy for logistical operations which reflects their expertise in this field.

*(c) Most pertinent arguments against FTA*

111. The most pertinent arguments against FTA are:
- (i) Many LME-listed warehouses store thousands of tonnes of warranted material. Should a warehouse operator fail to pass the licence renewal process, this material would have to be shipped to another warehouse location at the cost of the warehouse operator, which could cause significant disruption to the orderly functioning of the market. A lost licence could also cause severe disruption to a short seller of metal, who found themselves unable to warrant metal due for immediate delivery into the system, potentially causing them to default on their position.
  - (ii) Warehouse operators or other market participants may take the view that the maximum Headline Warehousing Charges reallocate economics too severely from warehouses to metal owners, particularly if incentives have historically been paid in respect of the underlying metal. Accordingly, warehouse operators may ignore the FTA system and challenge any attempt to refuse reauthorisation, or challenge the FTA rule itself, which could exert a disruptive impact on the LME market. The extent to which this is likely to happen will depend on the severity of the changes to Headline Warehousing Charges, as set out further in Section 2 of this Discussion Paper. While the LME believes that it would win any challenge to FTA, the disruptive interim effects may be deemed sufficiently undesirable that it would be deemed preferable not to proceed with implementation.



- (iii) If warehouses do adhere to the proposed maximum Headline Warehousing Charges, there is a possibility of all operators converging on the maximum Headline Warehousing Charges, with an apparent reduction in the level of competition in the marketplace. As set out in paragraph 91, the LME does not believe this would represent a valid interpretation of the fact-pattern – however, there would still exist a danger of competition law or regulatory action, which could exert a disruptive impact on the LME market.
- (iv) It could be argued that FTA represents CC “by the back door” without the certainty of CC, and it may be deemed preferable by the market, if the aim of the LME is to limit Headline Warehousing Charges, simply to do so by the more direct CC route.
- (v) Should the market as a whole accept and abide by the proposed maximum Headline Warehousing Charges, FTA could render the business of LME warehousing less attractive than at present for any warehouse operator currently levying charges above the FTA thresholds. Although the LME does not agree with this assessment (since, in the view of the LME, much of the high Headline Warehousing Charges generally are paid out as incentives), warehouse operators may (on that hypothesis) exit the market, hence reducing the provision of LME-listed warehousing services, and making it more difficult for metal owners to place their metal on LME warrant. This could cause problems for short position holders on the LME, who may not be able to deliver in metal and hence create an artificial backwardation.

(d) *Are there any other, less restrictive means of achieving the same objective(s)?*

112. The LME invites views from the market on this question.

(e) *Would the negative effects be too great to justify implementation?*

113. The LME does not believe that the negative effects of FTA would outweigh the benefits of addressing high Headline Warehousing Charges.

**Discussion Point 10: Do you have any comments or feedback on the FTA Discussion Item?**



## **B. CHARGE-CAPPING (“CC”)**

### ***B.1. Potential construction of CC***

114. CC would work by the LME publishing a maximum Headline Warehousing Charges schedule, on the basis of the considerations and process set out in Section 2 of this Discussion Paper. A rule would be added to the Warehouse Agreement requiring warehouses to set their Headline Warehousing Charges at levels not higher than the published maxima<sup>35</sup>.
115. It would be possible to introduce a modified version of CC, under which the obligation would apply only to warrants which were to be delivered against LME contracts, i.e. respecting the maximum Headline Warehousing Charges would not be a condition for all warrants. However, given that warrants not intended to be used for settlement are generally subject to bilaterally-negotiated storage agreements featuring significant charge discounts, it is not clear that this would materially impact the effect or impact of CC.

### ***B.2. Does CC seek to achieve a regulatory, prudential or organisational objective?***

116. The effect of CC could be to reduce the incidence of high levels of Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34, which in the view of the LME represents a key regulatory deliverable in the context of the LME market.

### ***B.3. Is CC likely to have an effect on competition?***

117. The LME observes that maximum pricing rules are not typically restrictive of competition because their direct effect is only to put a cap, and not a floor, on prices. The LME is aware, however, that one consequence of CC may be that Headline Warehousing Charges will broadly “float up” to or near to the maximum rates, and that the maximum Headline Warehousing Charges could act as a “signalling mechanism” by which warehouse simply set their Headline Warehousing Charges at, or near, the maximum levels. In other contexts, effects of that kind could be characterised as restrictive of competition.
118. As set out in paragraph 91, however, the LME’s provisional view is that in the specific context of Headline Warehousing Charges, such an effect would not be a

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<sup>35</sup> Rents are collected through the LMEsword system, and so the LME would simply not enter a value higher than the relevant maximum. FOTs are invoiced directly by the warehouse company to the metal owner, but it is a disciplinary offence for a warehouse to try to levy an FOT higher than stated in its Headline Warehousing Charges, which would be subject to the LME maximum levels.



restriction of competition. As explained above, the LME's analysis is that warehouses do not currently compete to set low Headline Warehousing Charges to attract business. Rather, competition takes place at a different level of the economic system – on the basis of discounted rates. Accordingly, the LME's provisional view is that CC would not restrict competition.

**B.4. Does CC comply with the principle of proportionality?**

*(a) Is CC capable of achieving the relevant objectives?*

119. On its face, CC achieves the relevant objectives by embedding them in an LME rule binding on warehouse operators. However, as further set out below, if CC were to be challenged (even if unsuccessfully), that may impact its short-term ability to achieve its objectives.

*(b) Most pertinent arguments for CC*

120. CC is expected to achieve the LME's stated aim of addressing high Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34. CC represents the most direct and straightforward means of achieving this aim.

*(c) Most pertinent arguments against CC*

121. The most pertinent arguments against CC are:
- (i) Warehouse operators or other market participants may take the view that the maximum Headline Warehousing Charges reallocate economics too severely from warehouses to metal owners, particularly if incentives have historically been paid in respect of the underlying metal. Accordingly, warehouse operators may challenge the CC rule itself, which could exert a disruptive impact on the LME market. The extent to which this is likely to happen will depend on the severity of the changes to Headline Warehousing Charges, as set out further in Section 2 of this Discussion Paper. While the LME believes that it would win any challenge to CC, the disruptive interim effects may be deemed sufficiently undesirable that it would be deemed preferable not to proceed with implementation.
  - (ii) Given that warehouses will be required to adhere to the maximum Headline Warehousing Charges, there is a possibility of all operators converging on the maximum Headline Warehousing Charges, with an apparent reduction in the level of competition in the marketplace. As set



out in paragraph 91, the LME does not believe this would represent a valid interpretation of the fact-pattern – however, there would still exist a risk that others would take a different view, and any competition law or regulatory action could itself exert a disruptive impact on the LME market.

- (iii) CC could render the business of LME warehousing less attractive than at present for any warehouse operator currently levying charges above the CC thresholds. Although the LME does not agree with this assessment (since, in the view of the LME, much of the high Headline Warehousing Charges generally are paid out as incentives), on this hypothesis warehouse operators may exit the market, hence reducing the provision of LME-listed warehousing services, and making it more difficult for metal owners to place their metal on LME warrant. This could cause problems for short position holders on the LME, who may not be able to deliver in metal and hence create an artificial backwardation.

- (d) *Are there any other, less restrictive means of achieving the same objective(s)?*

122. The LME invites views from the market on this question.

- (e) *Would the negative effects be too great to justify implementation?*

123. The LME does not believe that the negative effects of CC would outweigh the benefits of addressing high Headline Warehousing Charges.

**Discussion Point 11: Do you have any comments or feedback on the CC Discussion Item?**

**C. CHARGE THRESHOLD GUIDANCE (“CTG”)**

***C.1. Potential construction of CTG***

124. CTG could work by publishing maximum Headline Warehousing Charges as recommended thresholds or “shadow caps”, which would be guidance rather than compulsory. The maximum Headline Warehousing Charges schedule would be derived on the basis of the considerations and process set out in Section 2 of this Discussion Paper.

125. In the event that a warehouse operator proposed to exceed the cap, they would need to provide the LME with a full economic rationale. The LME would then have two choices. It could either accept the explanation, or it could consider that the



explanation did not have sufficient merit. In the latter case, the LME would then need to consider a range of options, including:

- (i) Action under Clause 9.3.1 of the Warehouse Agreement. As set out in paragraphs 52 and 53 above, the LME has concerns that action against unreasonable Headline Warehousing Charges under Clause 9.3.1 may not constitute the preferred route, for the reasons set out in those paragraphs;
- (ii) Action against incentives paid on the basis of such Headline Warehousing Charges, as further set out under the CBIG Discussion Item; or
- (iii) Implementation of CC.

**C.2. Does CTG seek to achieve a regulatory, prudential or organisational objective?**

126. The effect of CTG could be to reduce the incidence of high levels of Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34, which in the view of the LME represents a key regulatory deliverable in the context of the LME market.

**C.3. Is CTG likely to have an effect on competition?**

127. The competitive effects of CTG are likely to be very similar to those of CC. The only material difference is that warehouse operators will have less certainty that charging Headline Warehousing Charges above the maximum level will result in enforcement action. But the objective and intended effects of the measures are essentially the same: that all Headline Warehousing Charges would be below the maximum levels. Consequently, the analysis set out in paragraphs 117-118 above applies to the effects of CTG on competition as well.

**C.4. Does CTG comply with the principle of proportionality?**

**(a) Is CTG capable of achieving the relevant objectives?**

128. To the extent that warehouse operators heed the guidance of CTG, then CTG is capable of achieving the relevant objective. However, the danger exists that warehouses choose to maintain high levels of Headline Warehousing Charges, and simply challenge the LME to take action, given that CTG represents guidance, not a rule.





(b) *Most pertinent arguments for CTG*

129. CTG may achieve the LME's stated aim of addressing high Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34. In particular, the LME believes that most warehouse operators wish to play their part in promoting an orderly and efficient market, and would be expected to respect the maximum Headline Warehousing Charges promulgated under CTG, and indeed welcome the guidance and clarity thus delivered to the market.

(c) *Most pertinent arguments against CTG*

130. The most pertinent arguments against CTG are similar to those in respect of CC. The only additional consideration that the LME has identified at this stage is that a guidance regime creates risk of disorder in the event that warehouse operators chose not to follow the guidance. There is less certainty under CTG as to what consequences would follow the imposition of charges above the maximum levels.

(d) *Are there any other, less restrictive means of achieving the same objective(s)?*

131. The LME invites views from the market on this question.

(e) *Would the negative effects be too great to justify implementation?*

132. The LME does not believe that the negative effects of CTG would outweigh the benefits of addressing high Headline Warehousing Charges.

**Discussion Point 12: Do you have any comments or feedback on the CTG Discussion Item?**

**D. CHARGE-BASED INCENTIVE GUIDANCE ("CBIG")**

*D.1. Potential construction of CBIG*

133. CBIG could work by publishing maximum Headline Warehousing Charges for reference when considering whether incentives paid on the basis of such charges are consistent with LME rules. The maximum Headline Warehousing Charges schedule would be derived on the basis of the considerations and process set out in Section 2 of this Discussion Paper.



134. Thus, although the LME would not directly limit the level of rent and FOT set by warehouse operators, it would retain the ability to investigate incentives which it believed to be predicated on high Headline Warehousing Charges.
135. In the LORI and QBRC Implementation Notice (paragraphs 184-207), the LME laid out guidance in respect of the criteria which would be applied by the LME in determining the nature of acceptable incentive payments. This guidance underlines that a warehouse must be able to demonstrate that incentives paid in respect of a given parcel of metal are based on the expected rent and FOT which will be collected by the warehouse in respect of that parcel during its lifetime in that warehouse (which, for avoidance of doubt, cannot include the expected rent as a result of the metal sitting in a queue).
136. Under a CBIG regime, the LME would further guide that, when calculating the expected incentive which will be paid, it would not be appropriate to perform such calculations on the basis of rents and FOTs in excess of the published maximum Headline Warehousing Charges.
137. The payment of incentives calculated on the basis of rents and FOTs at or below these threshold levels does not guarantee that such incentives are not exceptional, or that the behaviour does not constitute compliance with the warehouse's responsibilities in respect of the proper functioning of the market. Incentives may still be exceptional in other respects.
138. These thresholds would not represent caps, and warehouses would be entirely at liberty to set their charges at a higher level. However, the LME would apply a high level of focus to any incentives paid by warehouse with charges higher than the threshold levels set out in order to assess whether those incentives were in excess of those which would be payable if charges were at the threshold levels. If this were the case, then the LME may deem such incentives as being exceptional, and take action against the warehouse operator pursuant to the Warehouse Agreement.
139. For the avoidance of doubt, even in the absence of a specific CBIG regime, the LME may still look to take action against incentives predicated on high Headline Warehousing Charges.

***D.2. Does CBIG seek to achieve a regulatory, prudential or organisational objective?***

140. The effect of CBIG could be to reduce the incidence of high levels of Headline Warehousing Charges, hence reversing the negative market effects set out in



paragraph 34, which in the view of the LME represent a key regulatory deliverable in the context of the LME market.

***D.3. Is CBIG likely to have an effect on competition?***

141. The objective and intended effects of CBIG are similar to those of CTG, discussed at paragraph 127 above. While warehouse operators would retain freedom to set higher Headline Warehousing Charges, in practice there would be a substantial penalty for doing so, in that the warehouse operator would be unable to offer competitive incentives based on those higher charges and would therefore be placed at a competitive disadvantage. For that reason, the LME expects that the impact on competition would be the same.
142. In the event that a warehouse operator chose to impose such higher charges, however, the direct consequence of CBIG would be that during that year, the warehouse operator's ability to grant discounts would be materially restricted, which might in itself be characterised as a restriction of competition.

***D.4. Does CBIG comply with the principle of proportionality?***

***(a) Is CBIG capable of achieving the relevant objectives?***

143. To the extent that warehouse operators react to CBIG by keeping Headline Warehousing Charges within the proposed maximum levels, then CBIG is capable of achieving the relevant objective. However, because of the "indirect" nature of CBIG, this cannot be guaranteed. In particular, warehouses may choose to keep levying high Headline Warehousing Charges, and simply take these as profit, rather than paying incentives on the basis of such charges.

***(b) Most pertinent arguments for CBIG***

144. CBIG may achieve the LME's stated aim of addressing high Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34. In particular, the LME believes that most warehouse operators wish to play their part in promoting an orderly and efficient market, and would be expected to respect the maximum Headline Warehousing Charges promulgated under CBIG, and indeed welcome the guidance and clarity thus delivered to the market.
145. Furthermore, by utilising an existing mechanism (the LME's powers against excessive levels of incentive), CBIG does not require the construction of an entirely new market enforcement mechanism.



(c) *Most pertinent arguments against CBIG*

146. The most pertinent arguments against CBIG are essentially the same as those for CTG, save for the additional argument, referred to above, that CBIG may restrict competition by preventing discounts from being granted by warehouses who (contrary to the LME's expectation and intention) continue to set higher Headline Warehousing Charges.

(d) *Are there any other, less restrictive means of achieving the same objective(s)?*

147. The LME invites views from the market on this question

(e) *Would the negative effects be too great to justify implementation?*

148. The LME does not believe that the negative effects of CBIG would outweigh the benefits of addressing high Headline Warehousing Charges.

**Discussion Point 13: Do you have any comments or feedback on the CBIG Discussion Item?**

**E. CONVERTING FROM AN "IN-WAREHOUSE" CONTRACT TO A "FOT-PAID" CONTRACT ("FOTC")**

*E.1. Potential construction of FOTC*

149. The LME physical network currently operates on an "in-warehouse" basis – namely the warehouse company fees for removal of physical metal from the warehouse are paid for by the owner of the metal at the time of removal from the warehouse. It is this fundamental point which gives rise to many of the potentially negative effects identified in Section 1, and in particular, the structure described in paragraph 24(b), whereby an incentive is paid to the depositor of metal (who will then become the seller of the metal on the LME), which will be funded by the eventual payment of (primarily) FOT by the acquirer of the warrant (i.e. the buyer of the metal on the LME). Furthermore, it is the in-warehouse nature of the contract which gives rise to much of the discounting effect set out in paragraph 34(b), in that a warrant purchased on the LME is subject to an "exit fee" represented by the FOT, and hence the LME price (which tracks the price of the marginal delivered warrant) is discounted from the "real-world" price by the quantum of that FOT.



150. Under an “FOT-paid” contract, FOT charges would instead be paid by the seller of metal on the LME, and not the buyer. This structure change would rectify the situation outlined above, because the depositor of metal in a warehouse would then be responsible for funding the FOT. As such, the economic situation would be far closer to that set out in paragraph 24(a), whereby a metal depositor who will eventually fund the payment of FOT is in a “zero sum game” between incentive and FOT – i.e. the benefits of accepting a large incentive are broadly offset by the fact that the same depositor must later fund that incentive through the FOT payment.
151. Furthermore, the fact that warrants purchased through LME settlement are no longer subject to an onerous “exit charge” will have the effect of causing the LME cash price to converge more closely to the “real-world” price of metal, as the discounting effect of the required FOT payment, as set out in paragraph 34(b), will no longer factor. While a discount will still exist in terms of brands, geographical location etc, the FOT component of the discount would be expected to fall away. Furthermore, the effect of a high FOT in “locking-in” correspondingly high levels of rent will also be diminished.
152. The LME has previously investigated the possibility of converting the LME delivery model from an in-warehouse basis to an FOT-paid basis, commissioning an independent economic consultant, Europe Economics, to undertake a study of the implications of this for the LME network. The subsequent report was published in LME Notice 07/076 : A074 : W038 (“FOT study”, 20 February 2007), and interested parties are referred to the full report on the LME website at: <http://www.lme.com/trading/warehousing-and-brands/warehousing/warehousing-studies/>
153. In the context of this Discussion Paper, the LME has returned to this topic, and conducted further preliminary analysis on the practicalities and feasibility of FOTC. The first question is the mechanism by which the seller funds the FOT payment, which in the view of the LME could take broadly two forms:
  - (a) Endorsement of warrants as “FOT-paid” before they would become valid in settlement. This obligation could be enforced either as:
    - (i) a general rule – all LME warrants would, by definition, require to be FOT-paid at the time of creation, and all existing warrants would need to be FOT-paid as of a given conversion date. This has the benefit of system simplicity, but would reduce optionality for metal owners who did not intend to deliver their warrants through settlement, but would still be forced to pre-fund FOT, possibly materially impacting cashflows in



respect of bilateral storage agreements. Furthermore, it is possible that disputes would arise in respect of bilaterally-negotiated discounted FOT arrangements, whereby it was envisaged that a discounted FOT would be paid at the time of withdrawal, but no arrangement had been made for the payment of an FOT on the conversion date (since this eventuality would not have been envisaged in the discounted FOT agreement); or

- (ii) a specific settlement rule (LMEs would only accept warrants in settlement which had been specifically endorsed as FOT-paid by the warehouse). This approach achieves flexibility, but would require greater processing attention during the settlement process, and could potentially give rise to misleading LME stocks figures as not all warrants in the system would be “good delivery” (although they could quickly become so upon payment of the FOT charge). Under either approach, a seller who has accepted a large incentive from a warehouse will then fund that incentive himself through an FOT payment, either at the time of load-in (which would render the incentive broadly irrelevant, as it would be immediately repaid), or at the time of on-sale of the warrant through settlement. This approach would also be required under a “parallel introduction” model pursuant to paragraph 154154(c), because it would be necessary for sellers to have access to both FOT-paid and FOT-unpaid warrants to settle contracts, depending on the date on which such contracts were opened.

A potential disadvantage for warehouses under either (i) or (ii) is that the FOT could be paid many years in advance of the actual load-out, by which time the costs of actually performing such load-out may have increased due to inflation.

- (b) A specific payment during the settlement process, whereby the cash paid by the buyer and received by the seller (currently the agreed price in respect of the LME contract for which settlement is being effected) is discounted by the amount of the FOT in respect of the warrant delivered in settlement. In this way, the seller “pre-funds” the FOT to the buyer, but the payment is not made to the warehouse operator until load-out actually takes place. If the seller has taken a significant incentive when loading-in the metal, then he will likely fund this himself through a significant FOT, which will reduce the price achieved for his warrant in settlement – accordingly, the buyer should not be affected. If the buyer subsequently on-sells the warrant through LME settlement, the pre-funded FOT is passed on (through the settlement



adjustment) to the new buyer, who can use this to pay the warehouse for load-out. This is the approach chosen for the LME's premium contracts.

154. Regardless of the route chosen above, the key logistical challenge is the mechanism of introduction of the new regime. In the view of the LME, there are broadly four approaches:

- (a) **Future introduction** – the simplest approach is to choose a date (the “Contract Basis Change Date”) in the future, beyond the maturity of the longest-dated LME contract currently in force. However, at present, aluminium and copper contracts can have maturities up to 123 months forwards – as at end-March 2016 the furthest forward position is December 2020. Accordingly, it would not be possible to introduce the change for approximately ten years, during which time the market issues set out in Section 1 would be expected to perpetuate<sup>36</sup>.
- (b) **“Big-bang” introduction** – under this approach, a nearer-term Contract Basis Change Date would be chosen, beyond which all LME contracts would be settled on an FOT-paid basis. Because open interest would already exist beyond this date (in respect of which buyer and seller had transacted on the basis that FOT would be funded by the buyer), it would be necessary – on a date prior to Contract Basis Change Date (the “Contract Conversion Date”) – to adjust all positions already open on the market with maturities on or after the Contract Basis Change Date. The simplest way to achieve this would be to simply increment all agreed transaction values by the expected amount of the FOT – then, in the settlement process, this would be reversed by the seller having to fund that quantum of FOT, with the net economics hence remaining the same.

The challenge in respect of such an approach would be in agreeing the correct level of FOT by which contract values should be adjusted on the Contract Conversion Date, given that this would properly be the FOT which would apply in respect of the warrant used in settlement of that contract. The nature of the LME market is that the warrant does not have to be identified until the day of settlement, and hence it would not be known on the Contract Conversion Date (and may increase through future charge-setting cycles prior to maturity date). Accordingly, sellers would argue that they had

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<sup>36</sup> Although there may exist structural approaches which would allow staggered earlier implementation which the LME is happy to discuss further.





intended to deliver a warrant with a very low FOT rate, while buyers would argue that they would normally expect to receive a warrant with a very high FOT rate. While it is broadly expected that high FOT warrants are used in settlement, identification of a “universal rate” for use in the adjustment process would pose a significant challenge.

- (c) **Parallel introduction** – as of a given date (the “Trading Conversion Date”) all contracts for maturities beyond the Contract Basis Change Date would be traded on an FOT-paid basis. However, positions already open in respect of such maturities would continue to exist on an in-warehouse basis. When positions were settled on their maturity date, they would be settled according to their particular status, i.e. if opened before the Trading Conversion Date, then they would be settled on an in-warehouse basis, and if opened on or after the Trading Conversion Date, they would be settled on an FOT-paid basis.

The challenge in respect of this approach arises where a market participant, rather than wishing to take a position to delivery, instead closes that position by entering into an offsetting trade. The nature of LME contracts as forwards means that, technically, the offsetting positions remain open until the maturity date, at which point settlement takes place “by offset”, i.e. no physical delivery of warrant is required. However, under this “parallel introduction” approach, if the position was opened before the Trading Conversion Date, and the offsetting trade entered into on or after the Trading Conversion Date, the positions do not precisely offset given the differential FOT treatment.

Under model (a) of paragraph 153, the two positions would technically require to be settled by two different warrants – the first position settled by an FOT-unpaid warrant, and the second position settled by an FOT-paid warrant. This would create significant logistical issues for the market participant, given the need to procure one type of warrant for delivery against the short position, and the need to receive the other type of warrant for delivery against the offsetting long position, when there was likely no desire to hold a warrant at all.

Under model (b) of paragraph 153, the logistics are more straightforward, since the adjustment is financial – accordingly, the difference between the in-warehouse and FOT-paid contracts can be addressed by a price adjustment in settlement (which should, *ceteris paribus*, reflect the price differences of the two underlying contracts, given their differing bases). However, as with the conversion process under the “big-bang” approach, the challenge is in



quantifying the correct amount, which will be dependent on the FOT applying to the warrants presented for settlement on the day in question (with consequent uncertainty on the precise economic terms of the position close-out until the day of maturity), unless an approach is taken whereby a “universal” standardised FOT rate is employed in the calculations, which would give rise to the concerns outlined above.

155. Under models (b) and (c) of paragraph 154 there exists an additional challenge, in that warehouses will still (in the absence of the introduction of a parallel Discussion Item which seeks to limit FOT rates) be free to set FOT rates, and so the total burden on the market will not necessarily change. While those warranting new metal would be able to select a warehouse with an attractive level of FOT, holders of existing warrants which they wished to use in settlement may still have to pay a high rate of FOT in settlement if they sold that warrant. It would still be open to warehouses to materially increase their headline rate of FOT year-on-year, in order to extract maximum value from these warrants before they were next used in settlement. Furthermore, FOTC cannot be expected to have any direct effect on rent rates.

156. Accordingly, although FOTC would be expected to eventually deliver a market where the drivers of high rates of Headline Warehousing Charges would eventually fall away, the transitional pathway is complex.

***E.2. Does FOTC seek to achieve a regulatory, prudential or organisational objective?***

157. The effect of FOTC could be to reduce the incidence of high levels of Headline Warehousing Charges, hence reversing the negative market effects set out in paragraph 34, which in the view of the LME represent a key regulatory deliverable in the context of the LME market. However, as outlined in paragraph 155, its practical impact would depend on the model chosen and would in any event be expected to have a direct effect on FOT rates only, and thus, the issues outlined in this Discussion Paper in respect of rents could be expected to persist.

***E.3. Is FOTC likely to have an effect on competition?***

158. As set out above, the LME expects that FOTC would have a positive effect on competition, in that warehouses looking to attract metal from metal owners planning to subsequently sell that metal on the LME would compete on the basis of low FOT charges, rather than high incentives, given that the FOT charges would need to be funded by the metal owner when selling the metal on the LME.



**E.4. Does FOTC comply with the principle of proportionality?**

(a) *Is FOTC capable of achieving the relevant objectives?*

159. Converting the LME contract to an FOT-paid contract would address the issues of lack of downward pressure on FOT rates and, as such, would be expected to reduce the incidence of high headline FOT rates. However, as noted above, it cannot be expected to have any direct effect on rent rates.

(b) *Most pertinent arguments for FOTC*

160. The most pertinent arguments for FOTC are:

- (i) An FOT-paid contract would directly reverse the current structural issue of lack of downward pressure on FOT charges, incentivising metal owners to negotiate discounted rates when depositing metal and promoting competition amongst warehouse operators
- (ii) This would be achieved without resorting to a specific price control regime.

(c) *Most pertinent argument against FOTC*

161. The most pertinent arguments against FOTC are:

- (i) The implementation difficulties, outlined in detail in paragraph 154, which could lead to instability in the LME market; and
- (ii) FOTC only addresses the issue of FOT rates. The issues outlined in respect of high rents might be expected to persist, unless FOTC was implemented in conjunction with a parallel measure intended to address high rents.

(d) *Are there any other, less restrictive means of achieving the same objective(s)?*

162. The LME invites views from the market on this question.

(e) *Would the negative effects be too great to justify implementation?*

163. If the procedural issues of contract conversion outlined above cannot be addressed, then the resultant market disorderliness may be too great to justify implementation. However, in the event that such procedural issues could be resolved, then the LME



does not believe that the negative effects of FOTC would outweigh the benefits of addressing high Headline Warehousing Charges.

**Discussion Point 14: Do you have any comments or feedback on the FOTC Discussion Item?**

**F. POTENTIAL APPLICATION OF INFORMATION BARRIERS TO ALL LME-LISTED WAREHOUSE COMPANIES (“IB”)**

164. The LME has in place certain provisions and procedures to establish and enforce strict information barriers between Warehouse Companies that are in the same Group as, or otherwise have a Close Connection with, a Member, or which have a Close Connection with any company which enters into LME Contracts or trades metal that is deliverable against an LME Contract, whether or not they are a Member of the LME (a "Related Warehouse").

165. Currently this is covered by Clause 9.13 of the Warehouse Agreement as follows:

*Each Related Warehouse shall maintain effective information barriers between it and the relevant Trading Company as specified by the Exchange from time-to-time as set out in the Notice: Information barriers between Warehouse Companies and Trading Companies (Ref: 14/202: A195: W098), or any successor notice. The Related Warehouse shall engage a firm of professional accountants in public practice, the choice to be agreed with the Exchange, to assure that the information barriers it has in place meet the criteria specified by the Exchange, under such assurance standard(s) and in such manner as the Exchange may specify from time to time.*

166. Although the LME believed, and continues to believe that its information barrier policy represented best practice, as part of the 2013 Reform Package the LME committed to commission a third party independent review of its information barriers which was duly undertaken in 2014.

167. As outlined in Notice 14/121 : A117 : W056 (“Further updates on warehouse and physical network reforms”, 1 April 2014), the conclusions reached by external counsel supported the LME’s view that the LME’s information barrier requirements generally provide for a robust and effective compliance framework to protect Confidential Information held by Warehouse Companies, the possession of which by third parties (including Trading Companies) could otherwise give rise to conflicts of interest and, potentially, market abuse.



168. The review did, however, helpfully recommend certain modifications to the existing requirements which the LME believed would further enhance certain aspects of the information barrier requirements. As such, the LME consulted on these changes (see Notice 14/110 : A107 : W049, “Consultation: Revised information barriers notice”, 28 March 2014), announced the results in Notice 14/201 : A194 : W097 (“Response to consultation on information barriers between warehouse companies and trading companies”, 2 July 2014) and implemented them via Notice 14/202 : A195 : W098 (“Information barriers between warehouse companies and trading companies”, 2 July 2014).
169. Although there has been no broad-based market suggestion that the LME information barriers should be subject to further review, recent discussions from certain members of the Warehousing Committee have queried whether all LME-listed warehouse companies should be subject to such requirements, rather than (as at present) the barriers being applicable to only those listed warehouse companies which have a trading company in their group.
170. The LME is aware of a number of arguments against the necessity of such a measure, including:
- (a) It is unnecessary given existing clauses in the Warehouse Agreement about confidentiality of data, including clause 6.3.3 which states:
- Information concerning stocks and Queues at Warehouses shall be treated as confidential by the Exchange [...] Warehouses are prohibited from revealing their stock of metal under Warrant to any person [...]*
- The Notice goes on to grant some exceptions to this rule, including information necessarily given to London Agents, professional advisors, and aggregated historical information.
- (b) Is it not in the interests of independent warehouse companies to give confidential information to one party over another, given the limitations this would have on their ongoing business relationships with all parties in the market.
171. However, in the interests of promoting a full and frank discussion with its market, the LME wishes to put forward the feedback received from the Warehousing Committee, and open up the information barriers questions for wider market feedback.



172. The following two suggestions have been made in respect of broadening the parameters for the information barriers:
- (a) That the language in the Warehouse Agreement should be made more robust, with clearer processes set out for reporting, investigation and enforcement of transgressions; and / or
  - (b) That third party audits should be introduced across all warehouse companies, regardless of ownership status.
173. The LME looks forward to market feedback on this matter.

**Discussion Point 15: Do you have any comments or feedback on the IB Discussion Item?**

**Discussion Point 16: Are there any other matters you wish the LME to consider in the context of any aspect of this Discussion Paper?**

**Matthew Chamberlain**  
**Head of Business Development**

Cc: Board directors  
User Committee  
All metals committees  
Physical Market Committee  
Warehousing Committee