

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

Ref: 15/190 : A186 : W062

Date: 1 July 2015

Subject: **DISCUSSION PAPER – FEEDBACK AND ANALYSIS**

Summary

- 1 This Notice (a) considers the feedback received in response to the Discussion Paper relating to possible reforms of warehousing policy and physical delivery network (the “Discussion Paper”, Notice 15/072 : A071 : W025), (b) explains why the LME believes that further reform is necessary, (c) considers each of the eight reform items contained in the Discussion Paper (the “Discussion Items”) in accordance with a framework designed to ensure that the LME implements the most proportionate response, and (d) explains which of the Discussion Items the LME is proposing to consult on.

Background

- 2 On 2 March 2015, the LME issued the Discussion Paper which put forward the eight Discussion Items which were variously aimed at addressing (i) existing queues; (ii) potential future queues; and (iii) the levels of rent and FOTs charged by warehouse companies. All eight Discussion Items were potential adjuncts to the LME’s Linked Load-In / Load-Out (“LILO”) Rule which was implemented on 1 February 2015, as amended¹.
- 3 The eight Discussion Items were as follows:

Measures to address existing queues and/or the impact of existing queues

- (a) A near-term increase in the standard load-out rate (referred to as load-out rate increase or “LORI”); and
- (b) queue-based rent capping (“QBRC”);

Measures to prevent accumulation of future queues

- (c) a queue-based warranting restriction (“QBWR”);
- (d) a modification to the seller’s option (“MSO”);

¹Pursuant to LME Notice 15/142 : A138 : W044 dated 27 April 2015, the LME has announced that the decay factor under the LILO Rule will be amended from 0.5x to 1.0x with effect from 1 August 2015. All references to the LILO Rule in this Notice should be construed to include the amended decay factor



- (e) a future queue length control mechanism (“FQLC”);
- (f) a restriction on warrant holder behaviour (“WB”), consisting of a limit on the amount of metal which a warehouse can accept for cancellation and load-out by any one warrant holder, or any two or more warrant holders acting together, at any one time; and
- (g) a future proportionate increase in the load-out rate (“PILOR”);

Measures to address the levels of rent and FOT rates charged by warehouses

- (h) charge-capping (“CC”).
- 4 The Discussion Paper is part of a programme of twelve core elements of warehouse reform that the LME undertook to implement in the 2013 Consultation Report and Decision Notice (Notice 13/326 : A312 : W125). Of these twelve core elements, nine have already been implemented: (a) the LILO Rule, (b) separate steel load-out rate, (c) per-warehouse queue length report, (d) commitments of traders report, (e) creation of the Physical Market Committee, (f) specific powers for the LME to address behaviour that creates or maintains queues (clause 9.3.4 of the Warehouse Agreement²), (g) information barrier policy review, (h) legal review of the LME Warehouse Agreement, and (i) an independent logistical review and the consultation necessary to implement the recommended changes outlined in the subsequent report. The tenth item is the LME’s commitment to explore the possibility of launching a set of regional premium contracts which required modifications to the LME’s warehousing policies in order to function effectively. These changes have been consulted upon and the contracts are due to launch in Q4 2015, subject to regulatory approval and a rule change consultation.
- 5 The two final items – re-assessing the possibility of capping or banning rents in queues and re-assessing the possibility of capping the level of daily rents and FOTs – were two of the eight Discussion Items included in the Discussion Paper (QBRC and CC respectively).
- 6 The Discussion Paper was open for two months, during which time the LME invited comments and feedback from the market and held over 45 meetings. The Discussion Paper closed on 2 May 2015.
- 7 The LME received 24 written responses from a broad cross-section of market participants. The LME would like to thank all those who responded to the Discussion Paper, or who contributed indirectly through committees, group and one-to-one meetings or calls.

² Now renumbered as Clause 9.3.5 of the Warehouse Agreement



- 8 The LME has taken all feedback received into careful consideration, and is today by separate notice (15/191 : A187 : W063, the “Consultation Notice”) launching a consultation on its proposed route forward (the “Consultation”). The Consultation will run for six weeks and the LME welcomes all feedback from market participants in relation to this. Any market participant wishing to submit a response to the Consultation, or to arrange for further discussions seeking clarification in relation to the Consultation, is asked to contact Georgina Hallett at consultation@lme.com or +44 (0)20 7423 5780.
- 9 Capitalised terms not otherwise defined in this Notice shall have the meaning ascribed to them in the Policy on Approval and Operation of Warehouses which will come into force on 1 August 2015 (the “Policy”) or in the Discussion Paper.

Why the LME believes it is necessary to take action

- 10 The Discussion Paper and the 2013 Consultation Report set out important background regarding the LME’s regulatory obligations and why it is necessary to take action. The information which follows summarises and supplements those documents.
- 11 The persistence of queues at certain warehouses has affected the functioning of the LME’s market and the trading of its contracts. As a consequence, it has affected the LME’s ability to demonstrate and provide its regulators, particularly the Financial Conduct Authority (“FCA”), with assurance that the LME has arrangements in place that will ensure that its warehousing arrangements operate in a way that enables the LME to continue to satisfy its regulatory obligations.
- 12 The Discussion Paper noted the persistence of factors which have been viewed by certain sections of the market as problematic. These include (i) in comparison with historical levels (and also rates for off-warrant storage), high rates of rent and FOT charged by warehouses, and (ii) queues at certain warehouses.

Rent and FOT

- 13 Headline LME rent and FOT rates have increased significantly in recent years. Charge increases from 2012/2013 to 2013/2014 were 7% for rent and 8% for FOT (computed as a stock-weighted average to accurately reflect the real financial implications). Following a call for voluntary restraint in respect of rate rises from the LME, for 2013/2014 to 2014/2015 these were 3% and 2% respectively. From 2014/2015 to 2015/2016 (based on November 2014 stocks figures) charge increases were 3% and 2%, respectively. In any event, and regardless of the rate of year-on-year increase, the LME understands that absolute levels of rent and FOT charged by warehouses for on-warrant metal are often significantly higher than “off-warrant” (i.e. non-LME) rates, even for metal of the same grade stored in the same location (although it should be noted that there is no published data regarding off-warrant material, so direct comparisons are difficult).

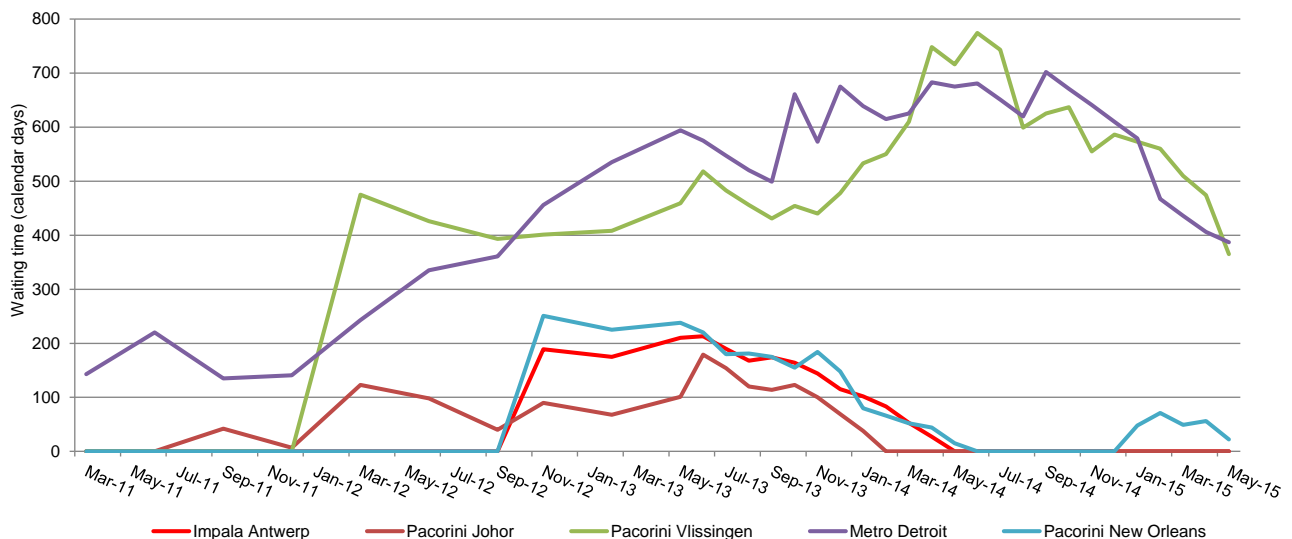


- 14 The LME's market exhibits some unique features which mean that there is very little downward pressure on LME rent and FOT rates. When a metal owner places metal on warrant, it has two options: (a) it may retain the warrant, or (b) it may sell the warrant through the Exchange. Where the metal owner intends to keep the warrant under model (a), or to sell the warrant bilaterally to a counterparty who will factor frictional costs of storage into the purchase price, that metal owner may be motivated to negotiate rent and FOT rates with the warehouse company. However, under model (b), the metal owner will sell the metal on the LME immediately, or shortly after, placing it on warrant (after which the metal may change hands a number of times before it is withdrawn from the warehouse). In this case, because negotiating lower 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. 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 metals. These inducements are funded by the rent and FOT paid by the subsequent acquirer(s) of the warrant on the LME.
- 15 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 acquirer of the warrant on the LME has no leverage over rents and FOT rates. The warehouse company will fund incentives through the profit element of FOTs, rent paid by the acquirer of the warrant in the normal course of post-settlement storage, and rent paid in queues (if such queues exist).
- 16 Because of the lack of downward pressure on rent and FOT rates, the LME understands that warehouse companies compete on incentives offered, rather than rent and FOT rates. Often such incentives will take the form of discounts on the published LME rent and FOT rates during any period of storage funded by the original metal owner prior to sale on the LME, but they may also take a number of other forms, such as free or discounted shipping or cash payments.
- 17 The LME believes that the level of incentive payments is an issue, both in the absence of queues (in which circumstance high levels of FOT are the general route by which incentives are funded), and in the presence of queues (where high levels of rent contribute to the existence of persistently long queues). Incentive payments, rents and FOTs 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. For the metal owners placing metal on warrant and for the warehouse operators, it is a virtuous circle. The large majority of metal loaded-in with the intention by the metal owner to immediately sell on the LME will be attracted, through the incentive mechanism, to warehouses with queues. However, this situation, combined with the fact that warrants in non-queued warehouses generally are not used in settlement, ensures that the vast majority of warrants used in LME settlement are located in warehouses with queues. Whilst the issues are complex, the net effect is that a situation prevails in which queues are longer than desirable for the LME system as a whole.



Queues

- 18 The LME notes that long queues persist at Metro Detroit and Pacorini Vlissingen. Although the queues at these warehouses are falling, they remain higher than is desirable for the orderly functioning of the market. In order for the LME to be able to continue to demonstrate and provide the FCA with assurance that the LME has arrangements in place that will ensure that its warehousing arrangements operate in a way that enables the LME to continue to satisfy its regulatory obligations, the LME (together with large sections of the market) believes that further action is necessary to accelerate the rate of queue decay and prevent queues arising in the future. The graph below shows the waiting time in calendar days for metal at the five warehouses with queues at 1 July 2013 (being the start of the LME's 2013 warehousing consultation).



Queue development at warehouses with queues as at 1 July 2013 (data as of 31 May 2015)

- 19 Long and persistent queues are damaging on the grounds that they may inhibit the LME's price discovery process by limiting or preventing arbitrage between the LME and the physical market, increase physical premiums, damage the reputation of the LME and thereby undermine the confidence of producers and consumers of metals in the LME price.
- 20 Queues make arbitrage more complex for three reasons:
- rent must be paid while metal is in the queue;
 - the length of queue is uncertain; and
 - other uncosted inconveniences (for example, the impact of market movements during the period in which the metal sits in the queue).
- 21 In simple terms, the impact of queues is to depress the LME price compared to the "real-world" or "all-in" price of metal, given that a buyer of an LME warrant must bear greater frictional costs to obtain that metal in a usable form, and hence will ascribe a discount to the value of that warrant.



- 22 Because the price of metal on the LME relates, through the possibility of physical delivery, to the value of the “least valuable” warrant on the market, the effect is to depress the LME price, and to create a discount between the LME price and the “real-world” price (which is generally observed by the market as the “real-world” price trading at a premium to the LME price). This can be damaging to the price discovery process because this reduction in value is a result of warrant cancellations and LME load-out requirements, rather than a result of developments in the physical market. Changes in the LME price will then be related to changes in queue lengths, as well as to physical supply and demand.
- 23 It is of particular concern that long queues may have a significant impact on the value of warranted metal, because any warrants whose value is significantly lowered will be used to settle Exchange contracts, and thereby set the LME price. Prices that are “discovered” on the LME platforms are used as the global benchmark and basis for physical trading, valuation of portfolios and in commodity indices and metal ETFs. All of the value chain sectors (concentration, smelting, refining and metal products) use the LME price as a basis for their physical purchases and sales.

Market impacts

- 24 Whilst the effect of these activities is to create a virtuous circle for some, they create a vicious circle for others. A listed warehouse that does not charge high rents or FOTs may find that metal is withdrawn. In order to maintain its business, therefore, it may increase its charges or offer inducements to bring metal on warrant. If it offers inducements it will likely in any event have to raise its rents and FOTs to fund the cost of the inducements offered by it. A warehouse company without queues will find it difficult to compete with a warehouse company with queues, given that a queue guarantees the warehouse company revenue for at least the duration of the queue. High incentives and the then necessarily high rents and FOTs risk artificially depressing the value of metal on the LME, affecting confidence in the proper operation of the market and price formation on which the physical market depends.
- 25 Notwithstanding the reforms to its physical delivery network which the LME has undertaken to date, and due partially to the delay to the introduction of LILO caused by legal proceedings, there continues to be a dislocation between the LME price and the price of equivalent metal in the physical market. The graph below shows the development of the premium percentage of the “all-in” price of US Midwest aluminium (which is made up of the LME price plus the US Midwest premium) from the start of January 2008 to the end of May 2015.



Premium percentage of “all-in” LME aluminium price (LME price + US Midwest premium per Metal Bulletin)

- 26 The price dislocation, together with the persistent queues at two warehouses, continues to pose a threat to the smooth and orderly functioning of the LME’s market and the reliability and integrity of the LME’s price discovery arrangements. They therefore also affect the LME’s assurance to the FCA described above.
- 27 In order for the LME to be able to continue to demonstrate and to provide the FCA with assurance that the LME has arrangements in place that will ensure that its warehousing arrangements operate in a way that enables the LME to continue to satisfy its regulatory obligations, the LME considered in the Discussion Paper whether it should take further action to address these issues. This included whether and how: (a) the existing queues at Vlissingen and Detroit could be reduced more quickly than could be achieved under the current load-out rates and LIFO (including the revised decay factor) and (b) changes could be made to address structural factors which may have the effect of incentivising and perpetuating the development and elongation of queues. Given the issues which queues cause, it is important both to ensure that the existing queues are addressed, and sufficient measures are put in place to mitigate, manage, and control queues in the future.
- 28 The structure and timing of the introduction of any additional measures will be a balance between a number of factors, including in particular (i) the need to reduce queues rapidly and ensure the continued orderly functioning of the market, (ii) the need to manage litigation risk and the potentially disruptive effect such litigation could have on the market, and (iii) the need for LME warehouses to have sufficient capacity to load in metal to allow the orderly settlement of contracts on the LME’s market.



- 29 The eight Discussion Items outlined in the Discussion Paper have been put forward as the best options to achieve the aims described above and variously cover the three main aims of the LME, namely to consider options which:
- (a) Address existing queues and their impact;
 - (b) Address potential future queues; and
 - (c) Address the levels of rent and FOTs charged by warehouses.
- 30 Specifically, the load-out rate increase (“LORI”) and queue-based rent capping (“QBRC”) might address existing queues³; queue-based warranting restriction (“QBWR”), modified seller’s option (“MSO”), future queue length control (“FQLC”), warrant holder behaviour (“WB”) and proportionate increase in load-out rate (“PILOR”) address the LME’s aim of disincentivising future queues (notwithstanding other action to date including the LME’s new powers to monitor incentives); and charge-capping (“CC”) might address broader structural issues about rent and FOT changes, even in the absence of warehouse queues.

Analysis of the Discussion Items: responses and LME framework for consideration

- 31 The LME remains fully committed to the key aims of the Discussion Paper, especially within the context outlined above, namely to fully explore potential reforms items including QBRC and CC as promised in the 2013 Consultation Report. A crucial component of this is gathering feedback and comments from the market on the Discussion Items to gain insight into market opinion on each of the potential routes forward.
- 32 Since the Discussion Paper closed on 2 May 2015, the LME has engaged in a process of analysis of all responses and feedback received during the course of the Discussion Paper period and below sets out an overview of this analysis.
- 33 As a general point about the feedback, it is worth noting that very few respondents highlighted a single Discussion Item as being sufficient in and of itself to achieve the desired end – although it should also be noted that there is considerable discrepancy of opinion as to what that end should look like.
- 34 The LME is aware that it is regulating for a very broad range of market users and, as such, any individual measure or “package” of measures has to be objective and proportionate for the LME market as a whole. With this in mind, the LME has used the feedback received to inform and refine its own thinking around the Discussion Items within a framework which is legally robust, objective and proportionate. The framework is as follows: for each Discussion Item, the LME will first summarise the market feedback, and then set out the LME’s analysis of that Discussion Item. The LME’s overriding objective in relation to consideration of each of the Discussion Items is to act proportionately and objectively. Therefore the LME has considered two questions for each Discussion Item, as set out in paragraphs 35 and 36.

³ But note that, depending on the timing of its introduction, QBRC could be used to address existing queues or future queues – see below



- 35 Firstly, does the Discussion Item comply with the principle of proportionality? In other words:
- (a) Is it capable of meeting the relevant objectives?
 - (b) What are the most pertinent arguments for?
 - (c) What are the most pertinent arguments against?
 - (d) Are there any other, less restrictive means of achieving the same objective?
 - (e) Would the negative effects be too great to justify implementation?
 - (f) Is it likely to have an effect on competition (noting that, even if it is likely to have an effect on competition, it may still be justifiable and proportionate if it complies with the principle of proportionality and all the other tests set out)?
- 36 Secondly, does the Discussion Item seek to achieve a regulatory, prudential or organisational objective?
- 37 By analysing each of the Discussion Items through this framework, and taking into account all the market feedback received, the LME is able to ascertain which of the Discussion Items to take forward to a consultation with the market.

MEASURES TO ADDRESS EXISTING QUEUES AND/OR THE IMPACT OF EXISTING QUEUES

Load-out rate increase (“LORI”)

Discussion Paper feedback

- 38 Broadly, an increase in the load-out rate was viewed positively by a majority of those who responded to the Discussion Paper⁴. Those in favour of LORI believe that it is easy to understand, straightforward to implement and that it will effectively reduce queues across the LME network. Generally, it was preferred that it be implemented as soon as possible.
- 39 Suggested amendments included preventing affected warehouses in any location from dropping down the thresholds for load-out as their stock levels fall until any queue was reduced below 50 days. Once the queue was reduced below this threshold, the warehouse company could adjust its load-out rate proportionate to remaining stocks as per the Policy.
- 40 Other respondents argued that LORI as it is formulated in the Discussion Paper does not represent a sufficiently aggressive policy unless either: (i) the thresholds are raised; (ii) the load-out rate applies on a per-shed level, as opposed to the current per location level; or (iii) it is implemented as a part of a wider package of reforms i.e. in conjunction with other of the Discussion Items as outlined below.

⁴ For the purposes of assessing LORI and all other Discussion Items, the LME has taken into account feedback received both in writing and in meetings



- 41 Critics were concerned that LORI would apply indiscriminately to all warehouses, rather than focusing on those who have existing queues over the 50 days threshold, and that warehouse companies will not have the logistical capacity to cope with increased load-out requirements leading to delivery failure and consequent market disruption.

LME analysis

- 42 The feedback has a strong correlation with the LME's own understanding of the arguments for and against LORI which are part of a broader question as to whether LORI complies with the principle of proportionality.

Does LORI comply with the principle of proportionality?

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

- 43 Historically, increases in load-out rates have proven ineffective in respect of reducing queues, since warehouses have had the ability to increase their load-in rates to compensate. However, with LIFO in force, this is no longer the case. LORI is aimed at accelerating the reduction of existing queues and mathematically, an increased load-out rate (in the presence of LIFO) would achieve this. The Consultation Notice explains the degree to which LORI is expected to accelerate the rate of queue decay. Therefore it is capable of achieving the relevant objective.

(b) *Most pertinent arguments for LORI*

- 44 The most pertinent arguments in favour of LORI are as follows:
- (i) LORI will ensure the timely load-out of metal at all warehouses, reducing current queues and helping prevent the emergence of future queues.
 - (ii) Even with the increase of the decay factor under LIFO, an affected warehouse is only obliged to load out more metal if it also engages in load-in behaviour. LORI's advantage is that even those warehouses electing to discontinue load-in would have to load out at an accelerated rate, if they fell into an applicable stock band and load-out demand was present.
 - (iii) The application of LORI across the LME's global network would also have a potential disincentivising effect on the development of future queues. Warehouses would be aware of their increased obligations and could adjust their load-in accordingly.
 - (iv) The LORI rule is straightforward, easy to understand and implement, and would not require major technical adjustments to LME or warehouse company systems. The proposed implementation date of 14 December 2015 (subject to consultation with the market and notice to the warehouse companies in accordance with the warehouse agreement) would give warehouse companies sufficient time to adjust to its implementation.



(c) *Most pertinent arguments against LORI*

45 The most pertinent arguments against LORI are as follows:

- (i) There are potential logistical concerns relating to increased load-out obligations – especially with regard to warehouses storing large tonnages of metal and those with queues – which include the capacity of warehouses to load out larger tonnages. These are fully explored in the 2013 Consultation Report and include that (A) significant operational differences exist between warehouses, and that some warehouses do suffer from significant logistical limitations which could make the imposition of higher requirements more difficult to implement, and (B) any increase in load-out (even at locations practically able to accomplish this) would require significant investment by warehouse operators. However, the LME believes the rates proposed under LORI are achievable for all warehouses. In particular, the LME notes that – by continuing to load in metals under LILO – warehouses are signalling that they are able to achieve load-out rates in excess of their current levels, and hence their ability to argue that the proposed LORI rates are logistically infeasible is reduced.
- (ii) A wider and general point applicable to LORI (and also PILOR) is that simple quantitative increases in load-out rates have up to now failed to reduce embedded queues, and that such measures may not address the features or functioning of LME's market and/or warehousing arrangements that may allow queues to form and/or to continue. However, it should be noted that such increases have not historically been combined with LILO, the effect of which is to prevent warehouses from offsetting increased load-out rates by simply increasing load-in to a greater degree.

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

46 The other option set out in the Discussion Paper which would accelerate the rate of decay of existing queues is QBRC. For the reasons set out below, the LME believes that the introduction of QBRC as soon as possible (in practice, expected to be in December 2015, given the requirement to consult and give notice of the change to warehouse companies) would be likely to lead to litigation, the uncertainty of which could have a materially detrimental impact on the LME's market. The LME therefore believes that LORI is, on balance, marginally less restrictive and more proportionate than immediate QBRC. However, the LME believes that QBRC introduced at some point during 2016 could be an effective and proportionate measure in conjunction with LORI.

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

47 The LME believes that the proposed increased rates of load-out under LORI are reasonable, achievable and proportionate, and would not impose unreasonable demands on warehouse companies. The LME notes that warehouses subject to the LILO rule have already elected



(by continuing to load in metal) to make themselves subject to increased load-out obligations – for example, during the First Discharge Period, Pacorini Vlissingen has been loading out over 4,500 tonnes per day on a number of days⁵; if it did not believe it was possible to load out at this rate, it should not have continued to load metal into its warehouses. Therefore it is highly unlikely that LORI will impose such materially increased obligations that warehouse companies will be unable to comply, or exit the market. LORI – in combination with the existing LILO rule – represents an effective way to accelerate queue decay and thereby ensure the continued operation of an orderly market.

(f) *Is LORI likely to have an effect on competition?*

48 LORI would constitute an increase in the rate at which certain warehouses would be required to deliver out metal. The LME does not believe that LORI would have an effect on competition.

Does LORI seek to achieve a regulatory, prudential or organisational objective?

49 LORI is seeking to accelerate the rate of queue decay. For the reasons set out above (“Why the LME believes it is necessary to take action”), this is a regulatory objective.

50 In light of the analysis set out above and within the context of the current LILO Rule, the LME believes that LORI represents a proportionate and fair means of reducing existing queues in an efficacious and timely manner, without affecting competition. For these reasons, the LME is proposing to implement LORI, and has today launched a consultation on this proposal in the Consultation Notice. The LME is not proposing to implement two of the amendments to LORI as proposed above (“freezing” stock count-based load-out rate reduction until a queue is below 50 days, or making the load-out rates more aggressive) as it is mindful of the imperative to balance the needs of all aspects of its market. The LME believes that the rules and rates currently proposed are proportionate and fair for all users. The LME does agree, however, that LORI would be most efficacious implemented in conjunction with other of the Discussion Items, and its intentions in this regard are outlined below.

Queue-based rent capping (“QBRC”)

Discussion Paper feedback

51 QBRC is one of two potential reform options which the LME committed to assess as part of its 2013 Consultation Report, and it has received a significant level of attention in the market since that point.

⁵ Load-out under LILO is determined by load-in. Load-in is at the discretion of the warehouse company. Therefore it could be argued that a warehouse company loading-in at this level is tacitly acknowledging that the consequent load-out is feasible.



- 52 Consistent with this, of all the Discussion Items, QBRC received the highest number of comments and, overall, there were more comments in favour than against. Proponents felt that it would reduce existing queues, help prevent the build-up of future queues and deter the payment of excessive incentives which, it is believed, have contributed to perceived market distortions. An additional advantage cited was the fact that QBRC does not restrict load-in by metal owners, although it was acknowledged that warehouse companies would accept load-in depending on their capacity to load out to avoid loss of rental income.
- 53 Of those who acknowledged the potential legal risks in pursuing this option and the potential for market disruption which this could provoke, most – but not all – believed that this was an acceptable risk in light of the potential benefits to maintaining a orderly market in the long term that QBRC could offer.
- 54 Critics have highlighted the potential for abuse, inefficiency and unintended consequences. These include excessive raising of charges by warehouse companies to compensate for loss of potential rental income, and the risk of market disruption through warrant holder “greenmailing”, i.e. warehouse companies being held to ransom by large cancellations designed to take advantage of cheaper “in-queue” rent (after 30 days) or no rent charges at all (after 50 days) which could both be unfair to warehouses. This improvement in the economics of cancellation could potentially have an additional unintended consequence of driving up queues.
- 55 As with LORI, other critics were concerned that it would be inappropriate for the LME to implement rules which target all warehouse companies rather than just those with queues of over 50 days and that the added requirements would make it difficult for some warehouse companies to stay in business. There were also concerns around limits and restrictions being placed on charging rent while service provision continues from warehouse companies.
- 56 Again, it was felt by some respondents that QBRC would be at its maximum efficiency if implemented in conjunction with other Discussion items. Other suggested amendments include changing the proposed thresholds so that the charges are never set at nil (or indeed, so that warrant holders with metal in queues do not pay any rent at all), implementation at a future date to lessen the risk of market disruption and limit the economic impact on warehouse companies, and only applying the rule to new metal.

LME analysis

Does QBRC comply with the principle of proportionality?

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

- 57 The LME believes that QBRC would be capable of achieving an acceleration of the rate of existing queues and/or preventing the occurrence of future queues. Although the proposal offers no guarantee that warehouse companies will load-out metal before the 30- and 50 day



thresholds, it does significantly disincentivise warehouse companies from retaining metal over such thresholds.

(b) *Most pertinent arguments for QBRC*

58 Many of the arguments for QBRC were highlighted by respondents to the Discussion Paper as outlined above. For completeness, the LME believes that the most pertinent arguments for QBRC are as follows:

- (i) QBRC would to some extent incentivise warehouse companies to load out metal within 30 days so that they were not liable to discount their rent rates for metal queued between 31 and 50 days. QBRC would more strongly incentivise warehouse companies to load out metal within 50 days, because they would not receive any rent for metal queued after this point.
- (ii) It would benefit metal owners who would receive rent discounts if their cancelled metal were subject to a queue greater than 30 days.
- (iii) QBRC would help to preserve the orderly functioning of the market in accordance with the LME's regulatory obligations. QBRC would ensure that warrant holders receive prompt access to their metal. The LME believes that somewhere between 30-50 days at most is an appropriate sourcing horizon for physical metal. Therefore QBRC would be likely to encourage an increased utilisation of the LME physical network as a source of delivery for physical metal. In other words, metal consumers might be more likely to source metal from the LME, rather than in the physical market, in times where they were unable to source metal anywhere else, or where the costs of doing so in the physical market were prohibitively high. As a result, QBRC is also likely to improve the arbitrage between the LME market and the physical market. As documented in the Discussion Paper and the 2013 Consultation Report, one effect of the queues has been to depress the LME price relative to the physical price of metal, as the waiting time for LME metal has been factored into the LME price. QBRC would be expected to improve the efficiency of the price discovery process to ensure that the LME price reflects the underlying price as effectively as possible⁶.
- (iv) If implemented on a future date (rather than as soon as possible), QBRC would arguably have less effect, or even no effect at all, on warehouse companies' existing investments (i.e. the amounts paid out in terms of incentives by warehouse companies anticipating that a queue would remain in effect for a certain period).

⁶ The LME notes that the impact on the LME price could be an issue for certain sections of the market. Indeed, this was noted as an "issue" rather than a "benefit" in the Discussion Paper. However, in light of the responses to the Discussion Paper, and after further consideration, the LME is of the view that improving the efficiency of the price discovery process is important to the fulfilment of the LME's regulatory obligations and will have beneficial effects for the functioning of the market as a whole



- (v) QBRC might reduce the financial attractiveness for warehouse operators to pay incentives for new metal to be loaded-in to their warehouses, if such incentives had originally been intended to be funded from rents charged in queues.
- (vi) Absent the risk of litigation affecting the orderly functioning of the market, QBRC would arguably be the most efficient method of accelerating the rate of decay of existing queues and/or preventing the accumulation of future queues, whilst striking the appropriate balance between the interests of different sections of the market. For metal owners, it would ensure that they are likely to receive their metal within an appropriate timeframe. It does not place any restriction on metal owners' ability to warrant metal or deliver metal in settlement of short positions (which, as discussed elsewhere, might risk settlement failure). For warehouse companies, it would give certainty as to the consequences of failure to deliver out within the 30 and 50 day thresholds, whilst permitting a warehouse company some flexibility to exceed the thresholds if necessary (acknowledging that the consequences will be a reduction in, or elimination of, the rent they can charge).
- (vii) QBRC has significant support from certain quarters, including regulators in the US. It is possible that some form of requirement for a queue-based rent cap may be written into US legislation in respect of the recognition of Foreign Boards of Trade, and also possibly potential future IOSCO principles in respect of physical delivery for commodity markets, should IOSCO choose to publish such principles.

(c) *Most pertinent arguments against QBRC*

59 The most pertinent arguments against QBRC are as follows:

- (i) Given the potentially significant impact on affected warehouses' business models⁷ the litigation risk related to QBRC may be higher than for other options. A challenge could engender uncertainty about where the price should be. Given the possible effect on the LME price which QBRC could have, this could have serious implications for the orderly functioning of the market over a significant period of time. However, as a result of feedback received from the market, the LME believes that the litigation risk, and therefore the risk of market disruption, might be ameliorated by a future implementation date.
- (ii) Concerns were expressed in the Discussion Paper regarding QBRC giving too much power to metal owners, particularly regarding the possibility of warrant holders undertaking (or perhaps threatening) large scale cancellations in order to obtain discounted or zero-cost storage from warehouse companies. A particular concern with QBRC (if implemented immediately) was that it might trigger large scale cancellations which could initially see queues rise rather than

⁷ At least if QBRC were implemented in respect of existing metal



fall. The LME believes that such concerns could be at least partially ameliorated by a future, rather than immediate, proposed implementation date. Furthermore, the likelihood of warrant holder “greenmail” can perhaps be overstated. Such a strategy would require a large concentration of warrants in one location, together with transport and alternative storage for very large volumes of metal: this would be an expensive and possibly risky strategy.

- (iii) Warehouses could respond to QBRC by increasing charges (rents, FOTs or both) in order to counter the limitations placed on the number of days for which rent may be charged. In extremis, it would be possible for warehouses to simply increase the FOT charge by the amount they expect to lose under QBRC, and hence in overall terms the economics for metal owners would remain unchanged⁸. This concern could be mitigated by CC, or at least the possibility of CC being introduced in the future (see below).
- (iv) There is no guarantee that warehouses would choose to load out metal more quickly. On balance, however, it is likely that warehouse companies would load-out more quickly, in order to free up space for metal in respect of which the warehouse company was able to collect income. Furthermore, even if the rate of load-out were not increased, the fact that metal owners would not be compelled to pay rent while sitting in the queue would reduce, to a certain extent, the frictional cost associated with withdrawing metal from the LME network, and hence the discount of the LME price to the “real-world” price of aluminium.

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

60 The LME acknowledges that, with LILO (and, potentially, LORI), the queues at Vlissingen and Detroit are likely to fall under the queue threshold during 2016, absent large cancellations of existing stock. A key question is whether this rate of decline is sufficiently rapid. Clearly it would be desirable to eliminate the queues as rapidly as possible, and QBRC would appear to be the most efficient method of achieving this. However, the LME has to balance the competing needs of different sections of the market, together with its overriding objective to preserve and enhance the orderly functioning of the market. The possibility of market disorder caused by the uncertainty of litigation remains a real concern. The Discussion Paper noted that such a concern could be mitigated in two ways:

- (i) Future implementation i.e. the rule would be implemented at a future date once queues are expected to have fallen significantly, or even fallen below the 50 day threshold altogether. Based on current modelling, the point at which queues might fall below the queue threshold at both Detroit and Vlissingen

⁸ The possibility of increased charges may arguably apply to any option set out in the Discussion Paper. However, given the possible impact of QBRC (if introduced in respect of existing metal) on the business models of certain warehouses, the possibility of increased charges is arguably particularly acute (at least in respect of warehouses with embedded queues)



could be between 26 April 2016 and 5 February 2017⁹. Therefore, the LME believes that a possible solution could be to implement QBRC at a point between these two dates, for example 1 May 2016. The reason for this is that the LME believes that the “worst case scenario” is reasonably unlikely to occur, and therefore the market could reasonably expect that the embedded queues at Vlissingen and Detroit would have fallen to beneath the queue threshold of 50 days by 1 May 2016.

- (ii) Exit provision. The Discussion Paper set out the possibility of an “exit” provision for warehouses in a Delivery Point which do not wish to be bound by QBRC. This might help to mitigate the risk of a warehouse company commencing litigation in order to protect the value of its investment in incentives, by allowing it to recoup the value of those incentives if it took advantage of the exit provision. However, the LME believes that an exit provision is less necessary if, as proposed, QBRC is introduced at a future date, rather than as soon as possible: if QBRC was introduced on 1 May 2016, warehouse companies would have more time to recover their investment before QBRC took effect.

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

61 The LME acknowledges the potential of the adverse effects outlined in above but feels that the benefits, combined with potential measures to mitigate the risks (such as future implementation on 1 May 2016) arguably outweigh the risks.

62 Certain market participants might argue that, given the only two remaining embedded queues are at Vlissingen and Detroit, it is disproportionate to introduce measures which affect all warehouses. However, as outlined above, the LME is also concerned to ensure that, amongst other things:

- (i) contracts admitted to trading on its markets are capable of being traded in a fair, orderly and efficient manner;
- (ii) 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;
- (iii) there are adequate settlement and delivery procedures for the metal traded on the exchange; and
- (iv) business conducted by means of its facilities affords proper protection to investors.

63 As such, any potential future queues are also an area of concern for the LME, and it would be remiss for the LME’s current reforms to focus solely on current concerns and not concurrently take into consideration operational best practice for its physical network going forward. Many of the LME’s warehouses contain significant volumes of stock which, subject

⁹ Including the impact of LORI, if implemented



to cancellation decisions made by metal owners, could become significant queues overnight. This risk does not apply to just Pacorini Vlissingen and Metro Detroit and, as such, the LME believes that measures to disincentivise future queues should apply to all warehouses in the LME network.

(f) *Is QBRC likely to have an effect on competition?*

- 64 QBRC is a prohibition on charging in certain circumstances (i.e. when queues reach a certain level). QBRC, in isolation, would still leave warehouses free to compete regarding the levels of rent, FOT rates and incentives. Arguably, QBRC would improve the ability of warehouses without queues to compete with warehouses which have queues – in other words, it would level the playing field on which warehouse companies compete.

Does QBRC seek to achieve a regulatory, prudential or organisational objective?

- 65 QBRC, whether introduced as soon as possible or at some point in the future, is expected to help to accelerate the rate of existing queues, and/or prevent the occurrence of future queues. This belief is based on the reasonable economic expectation that warehouses will not wish to store metal for no rent, and hence will be incentivised to load out such metal more quickly once rent can no longer be charged. As set out above, this expected outcome is consistent with the LME's stated regulatory objectives.
- 66 Given this, the LME believes that QBRC represents an efficacious policy lever in managing queues across its entire physical network. Having said this, and as outlined above, the LME is concerned that such a measure represents a fair and proportionate change across its broad user base and, as such, believes that a future implementation date would better balance the competing needs of the market. The LME's queue decay modelling suggests that the point at which queues might fall below the queue threshold at both Detroit and Vlissingen could be between 26 April 2016 and 5 February 2017¹⁰. Therefore the LME is proposing to implement QBRC as of 1 May 2016 to prevent the emergence of future queues, and has launched the Consultation Notice today to consult with the market on this option.
- 67 Given the proposed future implementation date, the LME does not believe that it is necessary or appropriate to include an exit provision such as the one outlined in paragraph 60(ii) above. The proposed timetable allows ample time for warehouse companies to amend their operations in preparation for the start of the QBRC rule. Such equivalence of effect thus obviates the need for such a provision and has additional benefits in terms of: (i) minimising the loss of investment on the part of warehouse companies; (ii) ease of implementation and scheduling; and (iii) negating the possible negative effects of an exit provision on warrant holders and their ability to rewarehouse metal. As such, the LME is not proposing to implement an exit provision.

¹⁰ Including the impact of LORI, if implemented



MEASURES TO PREVENT ACCUMULATION OF FUTURE QUEUES

Queue-based warranting restriction (“QBWR”)

Discussion Paper feedback

- 68 In general the market did not respond positively to potential reform on the basis of QBWR.
- 69 The most serious concern was that QBWR would prevent short sellers from warranting metal for settlement causing market disruption without adding any real value – especially given that the 10 day grace period was not viewed as a sufficient length of time to re-organise warranting activities. It was felt that the ability to deliver metal against an LME short is crucial for an orderly market, that removing it would create uncertainty on available delivery points and unfairly disadvantage short sellers, and that the magnitude of this reform was unnecessary to disincentivise load-in.
- 70 Other criticisms include the risk of increased costs for warehouse companies to monitor QBWR – even when they did not have a queue of over 50 days, making participation in the LME market less attractive, especially given that warehouse companies cannot control for the possibility of a mass cancellation. It could incentivise metal owners to store metal off-warrant, leaving less metal in the LME system leading to less liquidity and lower LME volumes. Generally, it was felt that market factors should dictate load-in, rather than artificially imposed restrictions.
- 71 In addition, the measure was felt to be overly complicated, unlikely to prevent new queues from forming, and unfairly punitive on warehouses, impeding their ability to be a genuine market of last resort and forcing them to raise charges.
- 72 However, those in support of QBWR refuted the risk to short sellers, arguing that metal could be put on warrant earlier reducing the potential risk of settlement failure in the event that their chosen warehouse was prevented from warranting new metal. The LME could maintain a panel to arbitrate in the event of legitimate cases.
- 73 Those who supported QBWR argued that it would help reduce existing queues – promoting faster load-out – as well as preventing an extension of the queue problem. It could lead to a more even distribution of metal across the LME network, thus eliminating bottlenecks and generating free market competition.

LME analysis

Does QBWR comply with the principle of proportionality?

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

- 74 QBWR might help to prevent future queues because metal owners could not place metal on warrant at a warehouse company once it had a queue. However, there would be nothing to



stop metal accumulating in large quantities at a warehouse; if all that metal was cancelled in a short period, a significant queue could still arise. Therefore QBWR would only be at best partially effective at preventing future queues.

(b) *Most pertinent arguments for QBWR*

The most pertinent arguments for QBWR are as follows:

- (i) The benefit of QBWR is, broadly, that it would prevent the warranting of metal at warehouses with queues as a warehouse could not warrant any new LME metal until the queue had been reduced below 50 days. This should also assist with the prevention of the accumulation of large volumes of metal at particular warehouses (which, if cancelled, could create or maintain a queue). Metal owners would therefore be obliged to consider alternative warehouses (or other options) for warranting their metal.
- (ii) Accordingly, while QBWR would not accelerate the rate of decline of existing queues (formed of existing cancelled metal), or the potential for existing live warrants to be cancelled and added to the queue, it would materially reduce the potential for new metal to be warranted, which could subsequently be cancelled and hence add further to the queue.
- (iii) It may additionally be the case that, in order to continue loading-in metal, warehouse operators choose voluntarily to increase their load-out rates and hence reduce the queue to below 50 days, at which point they would be able to compete again for metal. However, warehouse operators could choose to “monetise” existing queues by ceasing to load in at that particular location, and instead load in metal to a warehouse facility in a nearby location which would be unaffected by QBWR. Given that the ability of the warehouse operator to pay incentives at the queued location would be limited by QBWR, there would be little advantage to continuing to load in material at that queued location, rather than a nearby but distinct location.

(c) *Most pertinent arguments against QBWR*

75 The most pertinent arguments against QBWR are as follows:

- (i) QBWR might be criticised on the basis that it acts like a market share cap for warehouses, effectively excluding particular warehouses (in particular, large ones) from the market at precisely the times in which consumers of their services (those looking to place metal in LME-listed warehouses) appear to be demanding their services in large numbers.
- (ii) QBWR would not cause currently embedded queues to fall any more quickly than would occur under LIFO (as amended), because existing metal (cancelled in queues, or uncanceled with potential to augment the queue once cancelled) would not be affected by QBWR. Accordingly, the effect is one of disincentivising the accumulation of further metal, which – while it may prevent



the lengthening of the queue – does not reduce the existing queue any more quickly. Accordingly, the rate of price convergence via the removal of the queue-based element of premiums is not affected. Indeed, QBWR might even slow the rate of delivery out of metal from warehouses with queues (in comparison to the rate of delivery out which would be achieved under LIFO), because LIFO only increases the rate of delivery out if metal is delivered in. As set out above, QBWR could in theory be implemented in conjunction with LIFO.

- (iii) QBWR would impose a potentially significant burden on market participants looking to deliver metal in settlement of short positions. At present, short position holders will often position metal at or near a warehouse prior to the prompt date, and warrant just in advance of the delivery date. Under QBWR, there would exist a danger that, shortly before the prompt date, the intended warehouse develops a queue (which, for the avoidance of doubt, could occur at any warehouse if a large quantity of metal were to be cancelled) – and, through no fault of the short position holder, that participant would be unable to warrant the metal for settlement. The ten-day “grace period” embedded into the rule is designed to avoid the worst-case scenario of settlement failure (which would occur if the short position holder were unable to transfer the metal to another warehouse for re-warranting in time for delivery, or procure a different warrant), but there would still exist a frictional cost to the short position holder in effecting a movement of metal in this timeframe. Arguably moving the onus of responsibility for queues from warehouse companies to metal owners is unfair.
- (iv) QBWR would not absolutely prevent the creation of new queues. A warehouse operator looking to create a queue would be able to incentivise large amounts of uncanceled metal into the warehouse (with no queue) – all of this metal would be eligible for delivery as it would have entered the warehouse at a time when a queue did not exist. Once warrant holders started to sell their warrants and the new owners cancelled the metal, a queue would then accumulate. However, the LME believes that its powers to take action against abusive incentives would allow this situation to be addressed, even if such a scenario were theoretically possible under QBWR. In addition, the LME notes that, if QBRC or FQLC were implemented in conjunction with QBWR, the negative effects of the accumulation of the queue could be mitigated and/or the length of the queue controlled.

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

- 76 There are methods which achieve the same objective (arguably in a more balanced and effective way) but place the restriction on the warehouse company rather than the metal owner, for example QBRC, FQLC and PILOR.



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

77 The LME does not believe that QBWR would be the most proportionate and least restrictive mechanism to prevent the accumulation of future queues. It is arguably more proportionate to place the restriction on warehouse companies than metal owners, given that warehouse companies have been the primary beneficiaries of the rental income which has accrued as a result of queues. As set out above, QBWR would not prevent a warehouse company from accumulating large quantities of metal, which, if cancelled, would result in a queue.

(f) *Is QBWR likely to have an effect on competition?*

78 QBWR would prevent metal owners from warranting metal at warehouses with queues. It is therefore a restriction on the ability of a metal owner to place metal on warrant in certain circumstances, rather than a direct restriction on competition between warehouses or metal owners. It would in some ways arguably level the playing field between warehouse companies.

Does QBWR seek to achieve a regulatory, prudential or organisational objective?

79 QBWR might help to prevent the occurrence of future queues. As set out above, this is a regulatory objective.

80 However, as outlined above, the LME does not believe that QBWR represents the fairest or least restrictive reform option available, and, in line with the balance of opinions received to the Discussion Paper, does not intend to progress with QBWR as a policy option.

Modified seller's option ("MSO")

Discussion Paper feedback

81 Even more so than QBWR, responses in relation to MSO were overwhelmingly negative, with a number of concerns raised around any potential implementation, including the difficulty in assessing the potential consequences and the potential negative impact on short sellers.

82 More generally, it was felt that MSO would not disincentivise affected warehouses from attracting additional load-in, instead that it would facilitate "queue engineering" i.e. that queues would be designed to drop below the 50 day threshold to allow additional "top up" load-in and extend queue length. Respondents preferred that market forces dictate load-in rates.

83 Other concerns dealt with the potential market disruption including the driving of metal off-warrant, additional potential for market squeezing, the unfair penalisation of warehouse companies (and impediment to their ability to provide a market of last resort), the impact on accurate stock reporting, increased costs across the market including additional supervision and the risk that warehouses companies raise charges to compensate, that MSO would



discourage holding LME warrants at all, and that the rule was overly complex and offers limited added value especially in the context of LIFO and other potential reform measures. Overall, the view of respondents was that magnitude of an MSO-based reform was unnecessary to disincentivise load-in.

- 84 Despite the preponderance of negative views on MSO, some market participants approved of the fact that the rule would focus on warehouse companies and the original warrant holder choosing that warehouse, rather than the warrant holder who might pick up a queued warrant in settlement.

LME analysis

Does MSO comply with the principle of proportionality?

- 85 In the view of the LME, MSO raises a particular concern in relation to proportionality because it involves placing restrictions on warrant holders in order to deal with a problem at warehouses.

(a) Is MSO capable of achieving the relevant objectives?

- 86 To an extent, MSO may be capable of preventing future queues. The indirect effect of MSO is likely to be the same as for QBWR, namely that metal owners would be unwilling in practice to warrant metal in warehouses with long queues.

(b) Most pertinent arguments for MSO

- 87 The arguments in favour of MSO are broadly the same as those outlined above for QBWR. If market participants cannot settle LME contracts using warrants held in a warehouse with a queue, the outcome is likely to be that material would not be put on warrant at such warehouses.

- 88 It is worth noting that the seller's option delivery model of the LME¹¹ typically leads to the least-valuable warrant being delivered to settle an LME contract. In a situation where embedded queues are present at certain warehouses, the least valuable warrant will generally be at one of those warehouses. This frequently leads to the buyer receiving warrants held at warehouses with embedded queues. Therefore, it is arguable that the seller's option model potentially encourages the development and maintenance of queues.

(c) Most pertinent arguments against MSO

- 89 Arguments against MSO are broadly the same as those outlined above for QBWR, and in many cases, mirror those raised by respondents to the Discussion Paper. MSO also enjoys

¹¹ i.e. that the seller, rather than the buyer, chooses which warrant he will use to fulfil his delivery obligation



market participants in the regulation of queues at warehouses, and it could be argued that such a shift in the onus of responsibility is inappropriate.

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

90 Given the potential for market settlement failure, it could be argued that other methods for preventing the development of potential future queues would be less restrictive.

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

91 The primary negative effect would be settlement failure. This could have serious negative consequences for the orderly functioning of the LME's market.

(f) *Is MSO likely to have an effect on competition?*

92 The arguments regarding the possible restriction of competition for MSO are broadly the same as for QBWR.

Does MSO seek to achieve a regulatory, prudential or organisational objective?

93 MSO might help to prevent the occurrence of future queues. As set out above, this is a regulatory objective.

94 However, the LME agrees with the prevailing opinion of Discussion Paper respondents, and believes that the negative effects of MSO would be too great to justify implementation. It is worth noting that of all the options put forward in the Discussion Paper, MSO received the most negative feedback.

Future queue length control ("FQLC")

Discussion Paper feedback

95 Feedback on FQLC was mixed, with proponents arguing that the penalties involved would discourage warehouses from loading-in excessive tonnages of metal. In turn, this could lead to the listing of additional locations, increased competition, greater liquidity and lowered costs for warrant holders and warehouses. Ultimately, it was felt that FQLC – in conjunction with other Discussion Items and with a clear timeline for implementation – could restore the market to a more normalised supply and demand dynamic.

96 However, opinion was divided on whether a de facto restriction on load-in for warehouses where the consequent stock levels would risk placing them in violation of an FQLC-type rule should be viewed as a positive attribute, with other respondents arguing that warehouses would be forced to change their load-in behaviour or be vulnerable to unexpected operational queues. The extent of this restriction – and for as long as cancellations remain beyond the control of warehouse companies – could force warehouse companies to



substantially increase fees, prevent them from making any long term investments in LME warehousing, or force them to stop operating altogether.

- 97 Other critics highlighted the potential for “greenmailing” by warrant holders leaving warehouse companies vulnerable to queue manipulation, the costs and additional requirements which would be necessary for monitoring such a rule, and the additional level of complexity. All of these have the potential to drive metal into off-warrant storage with a subsequent negative impact on transparency.
- 98 Finally, some respondents cautioned about achieving a balance between equity and efficiency, suggesting amendments such as an increase in the cut-off point to 100 days, or implementation at a future date.

LME analysis

Does FQLC comply with the principle of proportionality?

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

- 99 The LME believes that FQLC would be capable of reducing queue length. The introduction of FQLC would mean that the LME warehouse network would have no queues of over 50 days without those queues being subject to investigation and sanction.

(b) *Most pertinent arguments for FQLC*

- 100 The most pertinent arguments for FQLC are as follows:

- (i) The benefit of FQLC in relation to warehouses that come into operation on or after the FQLC Initiation Date is that all metal would be subject to the FQLC Rule. Accordingly, all warrant holders would be protected by the FQLC Rule, and warrant holders would receive their metal within 50 days, failing which the relevant warehouse might be subject to disciplinary proceedings.
- (ii) In the case of a pre-existing warehouse, it is possible that non-New Metal remains in the Warehouse on the FQLC Initiation Date, and this metal would not be protected by the FQLC Rule. However, in this case, the FQLC Rule would be more incremental – as New Metal is loaded-in and older metal is loaded-out, then the balance of metal in the warehouse would shift towards New Metal, and hence be eligible for the protections afforded by the FQLC Performance Obligation. As such, FQLC could disincentivise the creation of new queues.

(c) *Most pertinent arguments against FQLC*

- 101 The most pertinent arguments against FQLC are as follows:



- (i) The LME does not think that it would be possible to apply FQLC to existing metal in warehouses as this would place an unreasonable burden on warehouses with large existing stocks of metal. As such, FQLC would not have any effect on existing queues and could therefore only be a forward-looking complement to LIFO and other rules designed to address queues. It should be noted that this is different to QBRC, in that the “penalty” in respect of a failure to load out within the thresholds specified under QBRC is simply a loss of rent, as opposed to FQLC, where such penalties would be disciplinary in nature.
- (ii) Additionally, in order to be able to comply with the load-out obligation under FQLC, it is reasonably foreseeable that warehouse operators may restrict the amount of metal that can be loaded-in to any given location, such that total stock does not exceed the level which can be fully loaded-out within 50 days. Accordingly, and particularly in the event of a future economic event resulting in large-scale demand for metal load-in to warehouses (as observed in 2008), the market should expect that warehouses would not be as willing to take in metal as has previously been the case.
- (iii) To the extent that FQLC may increase warehouse operators’ performance obligations, they may seek to compensate by increasing rent and FOT charges (this may be mitigated by CC, if introduced).
- (iv) FQLC arguably achieves broadly the same effect as QBRC, in that it effectively prevents queues of more than 50 days. However, it is arguably more restrictive, since it imposes an absolute prohibition on queue length, rather than affording some flexibility. The flexibility offered by QBRC over FQLC is (a) QBRC kicks in at 30 days with half-rent, and then imposes an absolute prohibition on rent at 50 days, and (b) QBRC would in theory permit the queue to be over 50 days, but warehouse companies could not charge rent for such a queue. Warehouse companies would also be unsure of the penalty which might be imposed with FQLC (i.e. what penalty a disciplinary committee might impose), whereas the consequences of QBRC are clear.

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

102 For the reasons set out above, the LME believes that QBRC is arguably more proportionate and less restrictive than FQLC.

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

103 The primary negative effect of FQLC would be to prevent warehouses loading in more metal than they felt sure they could load-out in 50 days. This might significantly restrict the amount of metal which a warehouse was willing to warrant. In a future downturn, this could have serious consequences. Therefore the negative effects may arguably be too great.



(f) *Is FQLC likely to have an effect on competition?*

104 FQLC would restrict the length of future queues by means of an absolute prohibition on queue length, sanctionable by disciplinary action against warehouse companies. It arguably would not restrict competition, given that all warehouse companies would be subject to the same prohibition on queue length.

Does FQLC seek to achieve a regulatory, prudential or organisational objective?

105 FQLC might help to prevent the occurrence of future queues. As set out above, this is a regulatory objective.

106 However, the LME believes that QBRC (implemented on a future date) achieves the same regulatory objective with less market risk caused by the potential restriction on the amount of metal warehouse companies were willing to place on warrant. Taking this, and market feedback into account, the LME is not proposing to implement FQLC as a reform measure.

Warrantholder behaviour (“WB”)

Discussion Paper feedback

107 As with FQLC, feedback to WB was mixed, with the market divided between those who view cancellations as the root cause of queues, and therefore welcome the initiative, and those who believe that the responsibility for queue management lies with the warehouse companies, and therefore that reform measures would be more appropriately focused at them.

108 Those in favour of WB supported the initiative to afford some measure of protection to warehouses, as well as disincentivising future queue development and limiting the LME’s physical network’s vulnerability to “flash queues”.

109 Concerns predominantly focus on the feasibility of warehouse companies (and the LME) being able to police such a measure in practice. These centre on the difficulties inherent within trying to prove a distinction between metal owners acting in concert – which would be considered abusive – and coincidental but genuine cancellations coming from several warrant holders concurrently. Additionally, it could be expected that non-independent warehouses would have no incentive to report large cancellations if they originated with their owner. A suggested alternative would be to ask the metal owners to provide the rationale for their cancellation, but it is anticipated that they would have little appetite for this approach.

110 Generally, critics felt that less artificial constraints would be preferable than a measure which could be perceived as penalising warrant holders, which poses practical difficulties – including how to set appropriate thresholds – and potentially renders the LME market less attractive.



LME analysis

Does WB comply with the principle of proportionality?

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

111 WB would prevent very large cancellations of metal, which may have arguably contributed to the build-up of queues at warehouses. However, for the reasons set out below, WB in isolation would arguably not be sufficient either to address existing queues or prevent future queues. Therefore WB would at the least need to be implemented in conjunction with other Discussion Items.

(b) *Most pertinent arguments for WB*

112 The most pertinent arguments for WB are as follows:

- (i) WB may help to prevent the future build-up of queues. As stated above, the cancellation and scheduling for load-out in a short period of very large stocks of metal held at one particular warehouse in one particular location could create “flash” queues, or prolong existing queues.
- (ii) As per the feedback received to the Discussion Paper, WB could provide some protection for warehouses, particularly if rules relating to QBRC or FQLC were to be implemented. In theory, if a warrant holder could accumulate large stocks of metal at one warehouse in one location, it could cancel those stocks and request load-out in one go, potentially creating load-out obligations on the warehouse which the warehouse could not fulfil within the specified timescale (for example, 50 days). A warrant holder could therefore in theory hold a warehouse operator to “ransom”, demanding benefits (e.g. reduced rent and FOT, reduced re-warranting charges etc) in return for not cancelling all the metal, or for putting some back on warrant.
- (iii) In addition, cancellations and requests for load-out of warrants on a very large scale arguably contribute to the market operating in a less orderly and efficient manner than is desirable. It is also difficult to see how cancellations and load-out of very large amounts of metal in one go would be necessary for any immediate purpose.

(c) *Most pertinent arguments against WB*

113 The most pertinent arguments against WB are as follows:

- (i) WB may be perceived to constrain a warrant holder’s ability to take delivery of metal as it sees fit. In particular, a warrant holder may wish to withdraw a large volume of material in order to move it to another storage facility so that it may benefit from what it considers to be more attractive terms relating to rent or FOT rates.



- (ii) WB only addresses warrant holders acting together; it does not address a number of independent but contemporaneous or near-contemporaneous cancellations which could also create or prolong queues but where warrant holders are not acting together.
- (iii) Therefore, at the limits proposed for WB in the Discussion Paper, it would still be possible for future queues to accumulate. However, a significant reduction of the limits (perhaps from 100,000 tonnes to 25,000 tonnes, for example) could materially constrain the ability of a warrant holder to do what it wishes with its metal, which could have serious problems for the orderly and efficient operation of the LME's market.
- (iv) Finally, it may be difficult for a warehouse to identify when two or more warrant holders are acting together. Whilst a warehouse could request further information, there is a limit to how much due diligence a warehouse company could in fact perform, and a limit to the powers which it might have to request such further information. Changes could be required to the terms and conditions of a warehouse company's contracts with its clients in order to give the warehouse company enhanced rights to request information to allow it to comply with the due diligence requirement. Equally, it may be difficult for the LME to request further information from certain warrant holders. Whilst the LME has reasonably extensive powers to request information from LME Members, it does not have the same rights over non-LME Members, as it has no contractual relationship with such non-Members.

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

114 For the reasons set out above, the LME does not believe that WB would be the most effective method of preventing the accumulation of future queues; in particular, the LME believes that QBRC implemented on a future date would be more effective and arguably less restrictive. WB might work in conjunction with certain other measures, but the LME does not believe there would be as much need for WB in tandem with QBRC given the LME's intention to reserve the right, with or without notice, to adjust the parameters of QBRC or to suspend its application either on a market-wide basis or on a per-warehouse basis in order to enhance the orderly function of the market or prevent abusive behaviour or for any other reason. This right is intended to afford protection to warehouse companies in the event of abusive "queue manipulation" behaviour on the part of warrant holders and as such, would render WB unnecessary.

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

115 The LME does not believe the negative effects would be too great to justify implementation, but the LME does not believe that WB would be the most effective method of achieving the aim of preventing future queues.



(f) *Is WB likely to have an effect on competition?*

116 WB restricts the amount of metal which one warrant holder, or two warrant holders acting in concert, may cancel at any one time. WB arguably does not have any direct effect on competition between warehouse companies or metal owners.

Does WB seek to achieve a regulatory, prudential or organisational objective?

117 WB might help to prevent the occurrence of future queues. As set out above, this is a regulatory objective.

118 However, as for FQLC, the LME does not believe that WB represents the best option for preventing future queues, not least because of potential restriction on warrant holders and the difficulties in policing such a measure, particularly for warehouse companies as highlighted in the Discussion Paper responses. As a result, the LME is not proposing to implement WB.

Proportionate increase in load-out rate (“PILOR”)

Discussion Paper feedback

119 PILOR received reasonably broad market support, with respondents reporting that it was both easy to understand, and practical in allowing warehouse companies the freedom to choose the size of their stock based on their capacity or willingness to load out. It was felt that PILOR would generate free market competition between warehouses and, over time, could help establish a more even stock distribution across the LME network.

120 Concerns include the potential advantage this rule would give warehouses which have the logistical capacity to load out more metal, especially those connected to water. Where warehouses were struggling to meet higher load-out rates, there was concern that this would result in a great number of disputes between warehouse companies and metal owners, especially around meeting delivery slots. On the other hand, PILOR could also be said to disadvantage warehouses with current high levels of stock, forcing them to reduce stock levels which could be viewed as anti-competitive. Arguably this would disincentivise their continued investment in LME warehousing.

121 There was some debate over the best implementation timeline, with some arguing for PILOR to come into immediate effect, and others that it should be implemented only after existing queues have fallen below the 50 day threshold.



LME analysis

Does PILOR comply with the principle of proportionality?

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

122 PILOR should in theory be capable of preventing the occurrence of future queues, given that the load-out obligations on warehouses would be significantly increased.

(b) *Most pertinent arguments for PILOR*

123 The benefits of PILOR are, broadly, that it would ensure that warrant holders receive their metal more expeditiously than currently. This would help to prevent the future build-up of queues and ensure the continued orderly functioning of the LME's market. PILOR would be straightforward to implement and to monitor, and would arguably give greater certainty to warehouses as to their load-out obligations than FQLC¹². In addition, if introduced, PILOR would apply to all metal irrespective of when warranted, as any warehouse company would have sufficient notice to adjust their delivery-in schedules accordingly.

(c) *Most pertinent arguments against PILOR*

124 As highlighted by Discussion Paper respondents, PILOR raises a number of concerns, and the most pertinent arguments against PILOR are as follows:

- (i) Effectively the concerns for PILOR would be broadly similar to those for FQLC – the increase would not have any effect on existing queues. As such, it could only be a forward-looking complement to LILO (including the proposed amendment thereto) and other rules designed to address queues.
- (ii) As noted above, simple quantitative increases in load-out rates have up to now failed to reduce embedded queues. Furthermore, such measures may not address the features or functioning of LME's market and/or warehousing arrangements that may allow queues to form and/or to continue.
- (iii) In order to be able to comply with the load-out obligation under this proposed rule, it is to be expected that warehouse operators may restrict the amount of metal that can be loaded-in to any given location due to concerns they would have in meeting the revised load-out rates. Accordingly, and particularly in the event of a future economic event resulting in large-scale demand for metal load-in to warehouses (as observed in 2008), the market should expect that warehouses would not be as willing to take-in metal as has previously been the case.

¹² Although note that FQLC and PILOR are not necessarily mutually exclusive



- (iv) To the extent that PILOR may increase warehouse operators' performance obligations, it is reasonably foreseeable that they may seek to compensate by increasing rent and FOT charges, which action may be viewed negatively by metal owners (although such concerns could be mitigated by CC, if implemented).

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

125 The LME believes that QBRC may be less restrictive than PILOR. Certain warehouses may well, for reasons either within or outside of their control, be unable to comply with load-out rates as high as 10,000 tonnes per day. It is to be expected, therefore, that certain warehouse companies may have to restrict the amount of metal they take in, in order to ensure they can comply with the delivery out requirements. The effect of PILOR for certain warehouses may well therefore be restrictive. It could be argued that certain other solutions, particularly QBRC, could be less restrictive.

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

126 The LME acknowledges the risks inherent within PILOR. Although a future implementation date would reduce the potential negative effects on the market, such negative effects, particularly for warehouse companies, are significant.

(f) *Is PILOR likely to have an effect on competition?*

127 PILOR would involve a significant increase in load-out rates for warehouses. It would apply to all warehouses equally. It would arguably have no restrictive effect on competition between warehouses or warrant holders.

Does PILOR seek to achieve a regulatory, prudential or organisational objective?

128 PILOR might help to prevent the occurrence of future queues. As set out above, this is a regulatory objective.

129 The LME considers PILOR to be a proportionate policy option and has engaged in extensive deliberations as to the merits of implementing such a measure. However, ultimately it considers that QBRC (implemented on a future date) achieves broadly the same aim as PILOR in disincentivising future queue development, but that PILOR has a disadvantage in that it has a potentially greater limiting effect on the amount of metal that warehouse companies are prepared to load-in. As such, the LME believes QBRC to be a more efficacious and fair policy, and is therefore not proposing to introduce PILOR at this time.



MEASURES TO ADDRESS THE LEVEL OF RENT AND FOT RATES CHARGED BY WAREHOUSES

Charge-capping (“CC”)

Discussion Paper feedback

- 130 CC was the second reform item, alongside QBRC, that the LME committed to explore as part of the 2013 Consultation Report. CC received predominantly positive feedback from a broad cross-section of respondents who felt that resolving the high current rates of rent and FOT would create a more level playing field and discourage the use of incentives funded by high rents and FOTs. The current discrepancy between LME rents and those for off-warrant storage was highlighted as being an area of concern, especially given that buyers (particularly those receiving warrants in settlement) are perceived as having little power to negotiate, and there is little currently to stop charges rising even further. It was felt that a more competitive rate system would bring more transactions back on-exchange.
- 131 Many respondents acknowledged the legal risks inherent in introducing such a measure and those concerned argued for a delayed implementation to allow sufficient time for all stakeholders to adjust to such a change. An alternative suggestion was to “cap” rent and FOTs at current levels, and implement a glide path to reduce these gradually over time.
- 132 Several respondents raised questions about the methodology for setting the rates, including concerns that using a third party consultant, although beneficial from an impartiality perspective, would mean the rents were set by parties who did not fully understand all the nuances of the business. Queries were also raised over whether the rates should be the same across the LME global network, or if these should be adjusted according to local factors.
- 133 Another modification proposed was that of “time-aging” warrants, so that the rental rates reduce over time. This would decrease the profitability of the queue and decrease the incentive to cancel metal in search of better rental rate at an alternative location, which could also help reduce queues.
- 134 Critics argued that the LME would be overreaching its remit in imposing artificial caps on warehouse operators’ businesses, that this would have an undue negative impact on the market, and would not restore any “normality” to the system. In the view of these respondents, the LME is free to stipulate the requirements for running a warehouse listed in its network, but should leave the operators to determine the cost of these operations or it will discriminate against those companies which distinguish themselves by offering better service. Ultimately, warehouse operators should be free to compete on service provision and cost, especially once further LME reform has had time to embed.
- 135 Similarly, it was argued that such a cap would be unfair to warehouse companies who have made significant investments in their warehouse operations with the expectation that they



would be able to attract metal; these plans would be substantially undermined by a charge cap. Taken to conclusion, this could mean that ultimately remaining in the LME warehousing business becomes uneconomic for some warehouse operators.

- 136 Finally, one respondent felt that this measure would not have a significant impact, given that so few metal owners pay full rent and FOT in reality.

LME analysis

Does CC comply with the principle of proportionality?

- 137 The LME believes that a cap on rent and FOT rates may well be necessary to ensure the orderly functioning of the market, given the problems that high rent and FOT rates have caused the market for a prolonged period of time. A cap could protect metal owners, reduce the harmful effects of high incentives, and ensure competition between warehouse companies. The LME notes that high rents, FOT rates and incentives have been an issue for a prolonged period, and it would appear that the additional reform measures which the LME is today consulting on (LORI and QBRC, implemented on a future date) will create additional burdens for warehouses which they might use as a justification for further increases in charges (although, for the reasons set out elsewhere, the LME does not believe that such increases would be warranted). The LME notes that it proposed within CC a number of measures to ensure that rents and FOT rates would be calculated in the most objective manner possible, in particular the appointment of an independent charge cap consultant (with objective criteria under which to operate) and a right of appeal to the Special Committee. The LME has also considered how it could introduce further objective criteria for CC, such as (i) linking any future increases to an index such as RPI, and (ii) keeping the need for CC under review on an annual basis, which would ensure the measure was as proportionate as possible. These are discussed in more detail below.

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

- 138 CC is capable of addressing the issues set out in above on why the LME believes it needs to take action, particularly in relation to high rent and FOT rates. As outlined above, this proposal has strong market support in the Discussion Paper feedback.

(b) Most pertinent arguments for CC

- 139 As set out above, CC could positively impact the orderly operation of the LME's market by eliminating or reducing the issues associated with high rents, FOT rates and incentives.
- 140 CC would provide protection to warrant holders who would be assured of some protection against rising rents and FOT rates.
- 141 Furthermore, it is anticipated that warehouse operators would find it less attractive to permit the accumulation of queues as the economic benefit of rent charging is reduced. In



particular, as noted above, one consequence of QBRC might be that warehouse operators seek to increase their FOT rates to compensate for revenue lost as a result of QBRC. CC would help control this by limiting the amount by which warehouse operators could increase their FOT rates.

(c) *Most pertinent arguments against CC*

142 The most pertinent arguments against CC are:

- (i) As explained above in relation to the arguments against QBRC, the risk of challenge could have a material impact of the orderly functioning of the market for a significant period of time.
- (ii) CC could render the business of LME warehousing less attractive than at present for any warehouse operator currently levying charges above the charge cap. In extremis (although perhaps unlikely), 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.
- (iii) The Charge Cap Calculation Cost may be passed on to metal owners via higher charges – which, in the case of a warehouse charging less than the Maximum Charge Schedule, may result in an increase in fees. The LME has considered methods of addressing this. In particular, it might be possible to link future annual increases to an index such as RPI, thereby obviating the need for a charge cap consultant on an annual basis. This might reduce the cost to a level which could be borne by the LME, thereby eliminating any need for a Charge Cap Calculation Cost.

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

143 This is the only reform option which would limit the amount warehouse companies were able to charge for rents and FOTs.

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

144 The LME believes that the long term benefits for the market would, on balance, outweigh the negative consequences, particularly if CC were implemented at a future date to allow adequate time for market and warehouse company adjustment. However, the LME remains conscious that a legal challenge to CC might have a “contamination effect” on the other measures (LORI and QBRC) on which the LME is proposing to consult. In other words, the LME is concerned that a challenge aimed principally at CC might also include LORI and QBRC. If such a challenge took a long time to defend, it could delay the implementation of LORI and/or QBRC. Further, the LME acknowledges that CC could have a significant impact on warehouse companies and other sections of the market.



(f) *Is CC likely to have an effect on competition?*

- 145 CC would constitute a cap on the maximum rents and FOT rates which warehouse companies could charge. The LME believes that CC would result in materially reduced maximum warehouse charges, compared with an absence of the cap.
- 146 It might be suggested that a cap on rent and FOT rates might serve as a focal point in relation to the maximum rates published by warehouses. However, the LME believes that warehouses will continue to compete to offer negotiated rates. Furthermore, even to the extent that it did serve as a focal point for published rates, a cap on maximum prices would serve to restrain such rates which, the LME understands, would otherwise be likely to continue to drive upwards.
- 147 Furthermore, the LME notes that, even where a cap on maximum prices might serve as a de facto minimum price, it is still in principle capable of being justifiable, if it is necessary in order to achieve an important objective. The objective here is the preservation of the operation of an orderly market, as set out in more detail above.

Does CC seek to achieve a regulatory, prudential or organisational objective?

- 148 For the reasons set out above, the LME believes that a cap on rent and FOT rates would achieve a regulatory objective.
- 149 However, given the risk inherent in implementing such a proposal, the LME is mindful to adopt a “wait and see” approach to CC at this time. This means that the LME reserves the right to introduce CC in the future, should the structural issues caused by high rents, FOT rates and inducements persist. The LME will therefore carefully monitor the market, and particularly the levels of rent, FOT rates and inducements, going forward. If necessary, it may be appropriate to introduce CC if rents, FOT rates and inducements remain at unacceptable levels.
- 150 If necessary, the LME would propose to implement CC broadly along the lines set out in the Discussion Paper, with certain modifications as explained below. Implementation of CC as per the below would be subject to consultation.

Proposed construction of CC, if required

- 151 CC would operate by the LME commissioning, for the first year of operation only, an external consultant (the “Charge Cap Consultant”) to produce a schedule of maximum charges (rent and FOT, collectively the “Initial Maximum Charge Schedule”) which may be levied in respect of each particular metal in each particular Delivery Point.



- 152 The basis on which the Charge Cap Consultant could operate is as follows:
- (a) for each metal and each location, assess the worst-case (i.e. most expensive) direct costs of providing the services in question, including all levies applied by the LME;
 - (b) assess worst-case (i.e. most expensive) indirect costs of providing such services;
 - (c) assess worst-case capital deployment to LME warehousing operations; and
 - (d) apply a target post-tax return on capital of 2x (the “Return Multiplier”) – the highest return observed from a set of public peers operating in the logistics sector.
- 153 The outcome of the above analysis would be a schedule of charges which, if charged by a warehouse operator, would still, on prevailing market conditions, be at a level at which warehouse operators ought to be able to generate an acceptable economic return even in a “worst-case” scenario. The timetable for this analysis, which would be initiated by the introduction date of CC, would be broadly as follows:
- (a) The Initial Maximum Charge Schedule would be published to the market.
 - (b) Warehouse operators wishing to dispute any particular maximum charge would be required to submit an official dispute, including a full economic rationale, within two weeks of publication. For the avoidance of doubt, the contractual right of dispute would apply only to warehouse operators, as only warehouse operators are bound by a contract to the LME.
 - (c) In each case of dispute, the LME Special Committee (consisting of market experts with no economic interest in the LME market) would consider the rationale provided by the Charge Cap Consultant against the arguments, and provide its decision (and, accordingly, a revised and final Initial Maximum Charge Schedule) within one month of the dispute being lodged. The decision of the Special Committee would be final and binding, and there would exist no further right of appeal for the LME or the warehouse.
 - (d) Warehouse operators would then submit their schedule of charges to the LME as at present. No charge would be permitted to be higher than the related entry on the Maximum Charge Schedule.
 - (e) The warehouse charge schedule would be published to the market as at present.
 - (f) If a new Delivery Point were licensed by the LME, or an existing Delivery Point was licensed to store a new metal, then an ad hoc assessment of permitted maximum charges would be undertaken in respect of the new charges thus created. These new charge caps would be published at least one month prior to the listing of the new location. Any warehouse operator wishing to challenge the level of such charges



would be able to do so following publication of a schedule to be announced by the LME at the time of licensing the new delivery point.

(g) In subsequent years, the Charge Cap would be calculated basis the Initial Maximum Charge Schedule and an index such as RPI, or other such measure to be discussed with the market during a consultation prior to the implementation of CC.

(h) If introduced, the LME would keep the need for CC under review on an annual basis.

154 In contrast to the construction of CC as set out in the Discussion Paper, the LME would propose that the work of the Charge Cap Consultant, and additional sitting fees of the members of the Special Committee (together the “Charge Cap Calculation Cost”), would be funded by the LME.

SUMMARY

155 The LME is grateful for the participation of the market in the Discussion Paper process, and looks forward to engaging further in the context of the Consultation on LORI and QBRC, in addition to a potential future consultation on CC, if required.

A handwritten signature in black ink, appearing to be 'Matthew Chamberlain', written over a horizontal line.

Matthew Chamberlain
Head of Business Development

Cc: Board Directors
Warehousing Committee
Special Committee
Physical Market Committee
User Committee
All metals committees