LONDON METAL EXCHANGE

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

Ref: 15/072 : A071 : W025

Date: 2 March 2015

Subject: **DISCUSSION PAPER RELATING TO POSSIBLE REFORMS OF WAREHOUSING POLICY AND PHYSICAL DELIVERY NETWORK**

Summary

1 This discussion paper has two purposes:

a. The LME notes the persistence of certain factors in the LME physical delivery network which have been viewed by certain sections of the market as problematic, in particular embedded queues at two warehouses. The LME has a regulatory obligation to ensure that, amongst other things, its market continues to operate in a smooth and orderly manner and that the LME price accurately reflects the underlying value of the metal. This discussion paper therefore puts forward possible further reforms relating to the LME's warehousing policy and physical delivery network, which are aimed at addressing existing queues and preventing future queues, on which the LME invites comments from the market. All of the possible future reforms referenced in this paper are potential adjuncts to the LME's Linked Load-In / Load-Out ("LILO") Rule, which was implemented on 1 February 2015, and in respect of which the LME is today announcing a separate consultation to amend the decay factor.

b. In its Public Report on the Warehousing Consultation pursuant to LME Notice 13/208 : A201 : W076 issued on 7 November 2013 (the "2013 Consultation Report"), the LME undertook to the market that it would review the scope of the LME's powers under competition law to identify and define a set of further policy options including the possibility of (i) capping or banning rents in queues, and (ii) setting maximum rents and FoT rates. The Annex to this discussion paper fulfils that commitment.

The Discussion Process

2 The possible reforms set out in this discussion paper could, if implemented, have a material impact on the LME's market, or certain sections thereof. It is therefore

considered appropriate to invite comment and feedback through a discussion process. Therefore this discussion paper is not a formal consultation: the LME reserves the right to consult on any proposed rule change resulting from the LME's dialogue with the market in accordance with the LME's contractual, regulatory and public law obligations.

3 The LME invites comments and feedback on this discussion paper from all interested market participants, and also regulatory and governmental bodies.

4 The LME would be grateful for responses to this discussion paper in writing. Anyone wishing to submit a response, or to arrange for further discussions seeking clarification in relation to the discussion paper, is asked to contact Georgina Hallett at consultation@lme.com or +44 20 7423 5780.

5 Although the LME will consider comments and feedback submitted in any format, to assist the process of considering responses it would be most helpful if respondents replied to the various numbered discussion points set out throughout this paper.

6 For the period during which the LME invites comments and feedback, the LME will, subject to reasonable logistical constraints, be available for meetings to discuss the subject matter of the paper.

7 The LME may need to share responses received with regulatory authorities or its legal or other professional advisers, or as required by law. Apart from this, all responses received will be treated in confidence.

Background

8 The background to this discussion paper is as follows:

a. the LME is a "recognised investment exchange" ("RIE") recognised and supervised by the Financial Conduct Authority ("FCA") under the UK Financial Services and Markets Act 2000 as amended ("FSMA"). To remain recognised, an RIE must at all times ensure, and be able to demonstrate, that it continues to satisfy the requirements for RIEs under FSMA (Recognition Requirements for Investment Exchanges and Clearing Houses) Regulations 2001 (the "Recognition Requirements"). Under the Recognition Requirements, the LME must therefore, among other requirements, ensure that: (a) contracts admitted to trading on its markets are capable of being traded in a fair, orderly and efficient manner, (b) the arrangements for determining the settlement price of its contracts must be such that the contract price properly reflects the

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

b. the LME first proposed the LILO Rule in 2013; after a period of delay due to legal proceedings, the LILO Rule was implemented on 1 February 2015. The LME has by separate notice proposed a change to the decay factor in order to accelerate the rate of queue decay for affected warehouses which continue to load in metal (see LME Notice 15/071 : A070 : W024);

c. notwithstanding the implementation of the LILO Rule (and the proposed amendment thereto), certain factors are likely to persist which have been viewed by certain sections of the market as problematic which affects LME's assurance to the FCA that its warehousing arrangements are operating in a way that enable it to satisfy its regulatory obligations. These include (i) in comparison with historical levels, relatively high rates of rent and FOT charged by warehouses, and (ii) queues at certain warehouses. Furthermore, whilst LILO is expected to reduce queues at affected warehouses to beneath the queue threshold of 50 days, it may take a significant period of time for this to occur[1]. This is likely to remain the case even if the LME's proposed amendment to the decay factor is implemented. Furthermore, the 10 month delay in implementing LILO due to legal proceedings against the LME has necessarily delayed the point at which such reduction is expected to occur;

d. 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 the legal proceedings, there continues to be a dislocation between the LME price and the price of equivalent metal in the physical market. 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 in (a) above. In order for the LME to be able to continue to

[1] The exact rate of queue decay is dependent on a number of factors, including whether and how quickly existing live stock is cancelled, and whether new metal is placed on warrant.

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 must consider whether and what further actions it should take to address these issues and concerns. These actions focus on 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 LILO (including the proposed 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. 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;

e. the possibility of capping or stopping rents in queues, or capping the daily level of rents and FoT charged by warehouses, has been raised by some sections of the market as a possible solution to the factors referred to in (c) above;

f. the LME has to date rejected rents in queues being capped or stopped due to the unacceptably high level of litigation and investigation risk;

g. following the 2013 consultation on warehousing, which resulted in the decision to implement LILO, the LME undertook to the market that it would review the scope of the LME's powers under competition law to identify and define a set of further policy options including the possibility of setting maximum rents and FoT rates; and

h. the LME intends to explore ways in which the current queues can be reduced more quickly than could be achieved under the current load-out rates and LILO (and the proposed amendment thereto). The LME also wishes to explore possible measures to prevent the factors referred to in (c) above occurring in future.

Elements of this discussion paper

9 This discussion paper puts forward a number of discussion items on which the LME wishes to test the views of the market (the "Discussion Items"). All the Discussion Items are possible adjuncts to LILO (including the proposed amendment thereto). The Discussion Items are sub-divided into three groups: (i) measures which are intended to address existing queues and/or the impact of existing queues, (ii) measures which are intended to prevent the accumulation of future queues, and (iii) measures to address the levels of rent and FOT rates charged by warehouses.

10 The Discussion Items are 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");

e. a future queue length control mechanism ("FQLC");

f. a restriction on warrantholder behaviour ("WB"), consisting of a limit on the amount of metal which a warehouse can accept for cancellation and load-out by any one warrantholder, or any two or more warrantholders 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 & FOT rates charged by warehouses

h. charge-capping ("CC").

11 The above Discussion Items are not mutually exclusive and some combination of them could be implemented. The exceptions to this are (a) QBRC and FQLC, and

(b) QBWR and MSO: in each case, these achieve the same aim and therefore the LME currently views them as alternatives (although in each case either of them could in theory be combined with any of the other Discussion Items). However, it is important to note that, as stated above, the LME is mindful of the need to address existing queues as well as address features of LME's market or warehousing arrangements which might encourage queues. In order to continue to demonstrate and to provide assurance to the FCA that LME has arrangements in place to ensure that its warehousing arrangements operate in a way that enables LME to meet its regulatory obligations, the LME anticipates that the LME would likely need to implement at least one Discussion Item or equivalent measure that addressed both concerns.

12 Where used, defined terms are taken to have the meaning ascribed to them under the revised Warehouse Agreement (pursuant to Notice 15/069 : W022) and revised Policies (pursuant to Notice 15/070 : A069 : W023).

Relationship to other LME warehousing initiatives

13 On 2 March 2015, the LME announced the outcome of two consultations on (i) proposed amendments to the policies and procedure relating to the LME's physical delivery network (Notice 15/070 : A069 : W023) and (ii) changes to the warehouse agreement (Notice 15/069 : W022). These consultations relate to changes which the LME had proposed in order to enhance the logistical efficiency of its physical delivery network and its powers to supervise that network. Such changes are distinct from the Discussion Items, which are specifically targeted at addressing the issue of persistent queues at LME-licensed warehouses.

14 Furthermore, the LME has, by separate notice, consulted on a proposed increase in the decay factor under LILO. It is proposed that the increase in the decay factor would be implemented on a separate timeline to any changes which might arise from any future introduction of any Discussion Items set out in this paper.

15 The LME has also committed to the market to introduce a set of regional aluminium premium contracts, allowing market participants to more effectively hedge the premium component of prices. However, given the potential impact of any of the Discussion Items (if implemented) on the level of premiums, the LME believes it appropriate to deliver certainty to the market on the adoption of any of these Discussion Items prior to launching a market for the trading of premiums.

Accordingly, the LME is planning the go-live of its premium contract suite on 26 October 2015[2].

16 The LME notes the very strong level of market interest in premium hedging contracts, and appreciates that many market participants are requesting that such contracts be made available as soon as possible. However, given the pressures set out above, the market must first gain clarity on the Discussion Items. Additionally, by committing to a definitive go-live date, the LME hopes to provide assistance to members and users in their technical scheduling and risk management planning. The LME continues to actively engage with market participants in respect of the premium contracts, including seminars for potential users, and the definition of a market-making scheme to ensure strong trading liquidity. Any interested parties are invited to contact Oscar Wehtje at the LME (oscar.wehtje@lme.com) for further information.

Timing and steps following the discussion period

17 The LME invites comments and feedback, and will be available for meetings, during the following period:

2 March 2015 to 2 May 2015.

18 The LME is not here consulting on any specific proposed rule. Any rule or rule change that might be proposed following this discussion paper would be subject to consultation with the market prior to implementation in the usual way.

19 The LME will aim to provide an update to the market in relation to the discussion paper by 2 June 2015.

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

20 If implemented, either of the following Discussion Items – LORI or QBRC – would have the effect of addressing existing queues and/or the impact of existing queues, as well as assisting with the prevention of queues in the future. The LME notes that, as explained above, the LME is under a regulatory obligation to ensure that the market continues to operate on an orderly basis and the LME's continued action in that regard is entirely consistent with that obligation. The LME not taking action to address existing queues and the continued persistence of such queues could call into question the LME's continued compliance with its regulatory obligations.

[2] This date is subject to regulatory approval from all relevant authorities.

A. NEAR-TERM INCREASE IN THE STANDARD LOAD-OUT RATE

21 One way to achieve an acceleration in the rate of queue decay would be to increase the standard load-out rates set out in the LME Policy on the Approval and Operation of Warehouses (the "Policy").

Construction of LORI

22 Paragraph C2 and C3 of the Policy would be amended to read as follows:

2. The minimum daily delivery tonnage must be in accordance with the tables below. Where the delivery requests exceed the minimum daily delivery tonnage for the capacity on the table below, the LME will regard the standard as applying over the number of days necessary to complete the deliveries, as per the table (e.g. if the requests for the delivery of 2000 tonnes apply to a DP Warehouse's capacity of 2500 sq. metres, the standard would be to deliver in 3 days with no reference to the performance on any one of those days). The LME would, however, expect the DP Warehouse to act reasonably when allocating the tonnage delivered out in each of those days.

DP Warehouse's authorised space in sq. metres (excluding steel storage facilities)	*Minimum daily delivery tonnage for all metals (excluding cobalt, RMC and steel)*
2,500	*800 tonnes*
5,000	*1,200 tonnes*
7,500	*1,500 tonnes*

The above table applies to all DP Warehouses who are storing up to 150,000 tonnes of metal. For DP Warehouses who are storing 150,000 tonnes and above, the following table is applicable.

DP Warehouse's tonnage stored (excluding steel)	*Minimum daily delivery tonnage for all metals (excluding cobalt, RMC and steel)*
150,000 tonnes to 299,999 tonnes	*2,000 tonnes*
300,000 tonnes to 599,999 tonnes	*2,500 tonnes*
600,000 tonnes to 899,999 tonnes	*3,500 tonnes*
900,000 tonnes and over	*4,000 tonnes*

NB: The daily delivery tonnage is for deliveries out only and does not include deliveries in.

3. Where a DP Warehouse's tonnage stored increases beyond any of the 150,000, 300,000, 600,000 or 900,000 tonnes thresholds, the applicable revised minimum daily delivery tonnage shall have effect from the date which is 30 days from the date the threshold is passed. This will allow the Warehouse to implement the necessary scheduling changes in order to meet the increased minimum daily delivery tonnage. However, where a DP Warehouse's tonnage stored falls beneath any of the 150,000, 300,000, 600,000 or 900,000 tonnes thresholds, a Warehouse will still be required to deliver out all outstanding deliveries scheduled on or prior to the date the tonnage falls beneath such threshold.

23 All other sections of the Policy would remain unchanged.

24 Such an amendment could be implemented in late 2015 or early 2016, subject to consultation and notice requirements in accordance with the warehouse agreement.

25 The increase the standard load-out rates would operate alongside the proposed increase in the decay factor under LILO from 0.5 to 1.

Benefits of LORI

26 The primary benefit of LORI is that it would accelerate the rate of queue decay at warehouses with queues. Even with the proposed increase in the decay factor under LILO, an affected warehouse would only be obliged to load out more metal if it also loaded in more metal. The advantage of LORI would be that, even in the event that an affected warehouse elected not to load in more material, it would have to load out at an increased rate. In addition, the threshold for the increased rate taking effect has been lowered to include warehouses storing above 150,000 tonnes, rather than the current threshold of 300,000 tonnes.

27 The LME expects that the implementation of LORI would have a material effect on the rate of queue decay. However, given the uncertainty of developments between now and the possible date for implementation of LORI (the LME does not know, for example, whether (a) further metal will be loaded into warehouses, (b) live stocks will be cancelled, or (c) existing cancelled stocks will be re-warranted) it is not considered appropriate to provide quantitative analysis at this juncture.

Potential Issues in respect of LORI

28 LORI would materially increase the obligations on warehouse companies, particularly those storing large tonnages of metal, and those with queues. The LME acknowledges that there are potential logistical concerns associated with imposing a quantitative load-out increase. These concerns were described in detail in the 2013 Consultation Report. The primary concern is in respect of the logistical capability (real or claimed) of warehouses. The LME concluded during the 2013 Consultation that (i) 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 (ii) any increase in load-out (even at locations practically able to accomplish this) would require significant investment by warehouse operators.

29 In short, a material increase in the obligations of warehouse companies could have three serious effects: (a) it is possible that a warehouse company may, for reasons beyond its control or otherwise, be unable to meet its delivery obligations, with negative consequences for the orderly functioning of the market, (b) the obligations on warehouse companies could be increased to the point where a warehouse company had no option but to withdraw from the market, or (c) warehouse companies may seek to compensate by increasing rent and FoT charges, which action may be viewed negatively by metal owners.

30 A wider and general point applicable to LORI (and also PILOR – see below) 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.

31 In spite of the above concerns, the LME believes that LORI, in combination with the existing LILO rule (as amended through the proposed decay factor change), would be an effective way to accelerate the rate of queue decay and thereby ensure the continued operation of an orderly market, consistent with the LME's continued compliance with its regulatory obligations.

Key parameters in respect of LORI

32 In the example set out above, the minimum delivery out rates for warehouses storing less than 150,000 tonnes of metal are unchanged. 150,000 tonnes has been

proposed as the threshold: only six DP Warehouses currently have tonnages above this level. Previously the level at which additional obligations took effect was 300,000 tonnes.

33 A warehouse storing over 150,000 tonnes must deliver out at least 2,000 tonnes per day. This would be an increase of 500 tonnes per day on current rates and is viewed by the LME as a realistic and achievable level for all warehouses.

34 A warehouse storing over 300,000 tonnes must deliver out at least 2,500 tonnes per day. This would be an increase of 500 tonnes per day on current rates and is viewed by the LME as a realistic and achievable level for all warehouses.

35 A warehouse storing over 600,000 tonnes must deliver out at least 3,500 tonnes per day. This would be an increase of 1,000 tonnes per day on current rates and is viewed by the LME as a realistic and achievable level for all warehouses. The LME notes that this is only 500 tonnes above the maximum current daily delivery out rate of 3,000 tonnes per day which applies to warehouses storing over 900,000 tonnes of metal.

36 A warehouse storing over 900,000 tonnes must deliver out at least 4,000 tonnes per day. This would be an increase of 1,000 tonnes per day on the current maximum rate. The LME expects that, based on current stock levels and behaviour, only one warehouse company in one location (Vlissingen) would be obligated to deliver out at this rate. The LME is of the view that the affected warehouse company has the logistical capability to deliver out at this rate, and notes that delivery at this location has been equivalent to or higher than this rate in the past. Other warehouse companies would, of course, have the choice about whether to take on stock above the level of 900,000 tonnes, thereby incurring the additional delivery out rates.

Discussion Point 1: Do you have any comments or feedback on the LORI Discussion Item?

B. THE QUEUE-BASED RENT CAPPING DISCUSSION ITEM

37 This section sets out how QBRC could work.

38 The Annex to this discussion paper explains the LME's historical view on the risk of challenge. The sections in this discussion paper on QBRC and CC, together with the Annex, fulfil the LME's commitment to the market made in the 2013 Consultation Report.

Construction of QBRC

39 QBRC could take the form of a new performance obligation for LME-listed warehouses, requiring that metal be loaded-out in the normal course within 30 calendar days following cancellation by the owner (approximately similar to the sourcing horizon of a metal consumer requiring access to metal brought on the physical market), and in exceptional circumstances within 50 calendar days following cancellation by the owner. In the event that the 30 day obligation were not met, then a sliding scale of consequences could be applied, in particular a reduction in the chargeable rent for the metal still queued:

a. at the point when metal is cancelled and all associated formalities have been completed by the metal owner (including payment of charges and provision of shipping instructions), a waiting time would start to be tracked in respect of the cancelled metal;

b. between 0 and 30 calendar days (30 calendar days being the “Rent Reduction Queue Threshold”), the warehouse could charge rent for the cancelled metal pursuant to its published schedule;

c. once the waiting time had exceeded 30 calendar days, but before the waiting time had exceeded 50 calendar days (being the “Rent Cap Queue Threshold”), the warehouse would be permitted to charge at most 50% (being the “Rent Reduction Proportion”) of the rent shown in its published schedule for the cancelled metal;

d. once the waiting time had exceeded 50 calendar days (a queue length which the LME considers indicates that the queue is structural rather than operational), the warehouse would not be able to charge further daily rent for the cancelled metal; and

e. in any event, the warehouse would levy the FoT charge.

40 For the avoidance of doubt, the above would not affect the ability (as at present) for metal owners to negotiate rent reductions with warehouses – the above levels would (as at present) represent maximum charges.

41 QBRC could in theory be made applicable to (a) metal already on warrant and metal placed on warrant in the future, or (b) only to metal placed on warrant after a certain date. Approach (b) might arguably assist in reducing litigation risk, given that it would not impact affected warehouse companies’ existing investments.

42 Furthermore, it could be possible to build into QBRC a specific "exit" provision for warehouse companies in a Delivery Point who do not wish to be bound by QBRC. Such an "exit" provision could assist with managing litigation risk from warehouse companies. An "exit" provision could operate by allowing any warehouse company in a Delivery Point to inform the LME that it did not wish to continue to operate in that Delivery Point. The LME would inform the market by notice, and the delisting would take effect some period of time later (possibly three months). During this period, warrants would continue to be good delivery for the purposes of the LME's market. Following the expiration of the relevant period and the delisting taking effect, any metal held by the warehouse company in its warehouses at that Delivery Point would be treated as cancelled stock, and the warehouse company would have to load the metal out of its warehouses pursuant to the prescribed LME load-out rates. The warehouse company would continue to receive rent and FOT rates at no more than the published LME rates until the metal is delivered out (although any discounts to such rates agreed between the warehouse company and the owner of the metal could continue to apply). This would ensure that:

a. warrant holders in the queue would receive the metal at the same time as they would if the warehouses remained listed. Warrant holders would lose the ability to re-warrant metal, although the LME notes that re-warranting metal has always been at the discretion of the warehouse company;

b. the warehouse company would continue to receive the rent it was expecting when it entered into any relevant incentive deals; and

c. holders of live warrants in the relevant warehouse in the Delivery Point could continue to sell such warrants on the LME within the notice period for the delisting (if they did not wish to remain in the queue), or otherwise such warrants would be automatically cancelled when the delisting takes effect and the warrant holder would be placed in the queue to receive their metal. The order in which the warrant holders would be allocated a position in the queue would be determined by the LME at random, and notified to the warehouse company (who would notify the warrant holder) but the warehouse company would continue to observe the prevailing LME load-out rates until all the metal had been delivered out.

Benefits of QBRC

43 QBRC could benefit warrant holders as they would receive rent discounts if their cancelled metal were subject to a queue greater than 30 days.

44 If introduced in respect of metal already on warrant, QBRC could have the effect of accelerating queue decay[3]. In addition, even if only applicable to metal placed on warrant after a certain date, QBRC could make it less attractive for warehouse operators to allow queues to accumulate, given that such warehouse operators would not receive rent for metal in a queue of over a certain length. In addition, QBRC might reduce the financial attractiveness for warehouse operators to pay incentives which are modelled on queue length.

45 For the sake of completeness, and to the extent that it is relevant, the LME notes that certain other markets, both in the UK and elsewhere, have implemented provisions similar to QBRC. The primary concern for the LME market stems from the litigation risk, given the amounts which certain warehouses have invested with the expectation of a return based at least in part on a queue, and particularly the market disruption which could result from litigation (see the Annex for more detail).

Potential Issues in respect of QBRC

46 It may be said that QBRC could have the following effects:

a. impact on the LME price and particularly on holders of forward short positions. The view expressed in the 2013 Consultation Report (see section 5.4) was that the LME price is derived from the physical spot market price, and that one impact of the queues may have been to depress the LME price relative to the physical spot market price. A possible impact of introducing QBRC in respect of existing metal may be to cause the LME price to increase. This increase would likely be material, and also potentially immediate (if QBRC was introduced in respect of existing metal). Such an immediate increase would clearly impact holders of existing forward short positions, who had taken such position with no expectation of QBRC being implemented;

b. connected with the above is the risk of challenge (see the Annex). Given the potentially significant impact on affected warehouses' business models[4], the litigation risk related to QBRC may be higher than for other options. A challenge to QBRC brought through the courts, together with the ensuing appeals process, could engender a long period (possibly several years) of market uncertainty about whether or not QBRC was going to be implemented. Given the possible effect on the LME price which QBRC could have, this could

[3] Although there is no guarantee that warehouse companies would choose to load out more quickly – see below.
[4] At least if QBRC was implemented in respect of existing metal.

have serious implications for the orderly functioning of the market over a significant period of time;

c. retroactive implementation, i.e. application to metal which was loaded-in under the old rules (this is connected with b above). A change that would reduce the level of rents in queues would directly impact a warehouse operator's anticipated income stream from metal already in its warehouse. It is reasonably foreseeable that operators may seek to challenge this. On the other hand, if only made applicable to metal loaded in after a certain date, QBRC would have no effect on the rate of decay of existing queues;

d. the power of warrantholders / incentive to cancel warrants. If QBRC were implemented, it is reasonably foreseeable that a metal owner may seek to manipulate it to obtain free storage: it could buy warrants in a given warehouse and then cancel all of those warrants, with the aim of creating a queue and in the knowledge that warehouses could not recover rent in respect of such warrants. If the warehouse were unable to increase its load-out rate, then it would effectively be offering free storage to the metal owner. In addition, QBRC could lead to metal owners cancelling warrants in order to receive the benefit of reduced (or zero) rent. Accordingly, it could well be observed that queues initially increased through the actions of metal owners rather than warehouses, although the owners of metal in those queues would be subject to a lower rent liability pursuant to QBRC. These concerns could be mitigated to some extent by WB (see below);

e. increasing charges (rents, FoTs or both). 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 unchanged[5]. This concern could be mitigated by CC (see below); and

f. no guarantee that warehouses would choose to load out metal more quickly. There is no guarantee, even in the absence of rents being charged, that warehouse operators would choose to load out metal more quickly. Increased load-out may in some instances require greater investment in warehouse

[5] The possibility of increased charges may arguably apply to any option set out in this 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).

logistics, and hence operators may prefer to keep metal in their warehouse (even if that metal is not paying rent), rather than provide quicker load-out. Ultimately, the rate of increased load-out (if any) would be driven by the economic balance for the warehouse operator between the cost of providing free storage, and the cost of loading-out the metal. 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.

Key parameters in respect of QBRC

47 The Rent Reduction Queue Threshold could be set at 30 days, which is viewed by the LME as being an average sourcing horizon for a metal consumer requiring access to metal bought on the LME cash market. The argument would be that it is appropriate that if metal is not available within this timescale QBRC should begin to penalise the warehouse operator concerned.

48 In the example above, the Rent Cap Queue Threshold is set at 50 days, so as to be aligned with the 50 day proposed queue threshold under the LILO Rule. The reasoning is similar to that of the LILO Rule, namely the distinction between operational and structural queues. Queues over 50 days are viewed by the LME as structural, and so are precisely the queues which would be targeted most vigorously by QBRC.

49 The Rent Reduction Proportion would provide a measured "glide-path" for metal in queues to move from charging full rent to zero rent. As such, the LME believes it would be appropriate for the Rent Reduction Proportion to be set at 50%, thus bisecting the rent payable before 30 days, and the rent payable after 50 days.

50 The possible notice period for the "exit" provision is set at three months. The LME thinks this is a reasonable period of notice to allow for orderly trading of warrants prior to the warehouse company in the Delivery Point being delisted and the remaining stock being automatically cancelled.

51 In the example above, no date has been proposed for implementation. This is because QBRC could either be implemented (a) in respect of existing metal, in which case it could be introduced on a relatively swift timeline (perhaps early 2016), or (b) in respect only of future metal, in which case it could be introduced at some point in

the future when the queues have been reduced below the queue threshold (perhaps 1 April 2018[6]).

Discussion Point 2: Do you have any comments or feedback on the QBRC Discussion Item, including any of the matters set out in the Annex?

Measures to prevent accumulation of future queues

52 If implemented, any of the following Discussion Items – QBWR, MSO, FQLC, WB and PILOR – would have the effect of preventing the accumulation of future queues, but would have little or no effect on existing queues.

C. THE QUEUE-BASED WARRANTING RESTRICTION ("QBWR") DISCUSSION ITEM

53 Queues at warehouses, and in particular the continued warranting of new metal at warehouses with queues over a certain threshold, could be addressed by preventing a warehouse with a queue over a certain threshold at a delivery point from creating new warrants at that delivery point.

Construction of QBWR

54 A Queue Based Warranting Restriction could be added to the Warehouse Agreement as follows:

9.14 Queue Based Warranting Restriction

This Clause shall apply from 1 January 2016 and in respect of a Warehouse with a Queue at a particular Delivery Point of over 50 calendar days. At any time between (both dates inclusive):

(i) the eleventh Business Day following the publication of a Notice by the LME that a Queue of over 50 calendar days exists at that Warehouse in that Delivery Point, and

(ii) the Business Day following the day of the publication of a Notice by the LME that such Queue had fallen to or below 50 calendar days

the Warehouse may not place any further metal on Warrant in the relevant Delivery Point. For the avoidance of doubt, nothing in this Clause shall at any time prevent a Warehouse from re-warranting metal in a Queue.

Additionally, a new Clause 6.3.4 could be added to the Warehouse Agreement:

[6] But note that the LME will keep this date under review given that the amendment to the decay factor proposed in the current consultation may affect the rate of decay of existing queues

6.3.4 On or before 30 December 2015, any Warehouse which will have a Queue of over 50 calendar days in a Delivery Point as at 4 January 2016 shall inform the LME of that fact. The LME shall, no later than 4 January 2016, disclose this fact to the market by means of a notice. In addition, on every occasion when a Queue of over 50 calendar days emerges or falls away at a Warehouse in a Delivery Point, the Warehouse shall inform the LME on the day of that occurrence. The LME will, no later than the following Business Day, disclose this fact to the market by means of a notice. For the avoidance of doubt, the trigger for such reporting shall be the time at which a metal owner requesting cancellation of a Warrant on the present date would be assigned a delivery slot on a date later than 50 days from the present (signalling the emergence of a Queue of over 50 calendar days), or a slot 50 days from the present or sooner (signalling the falling away of a Queue of over 50 calendar days).

Benefits of QBWR

55 The benefit of QBWR is, broadly, that it would prevent the warranting of metal at warehouses with queues. Historically, warehouses with queues have been able to offer higher incentives for the load-in of additional metal, funded on the basis of expected rental income derived from the metal sitting in a queue awaiting load-out. If warehouses cannot create new warrants, they may not be able to continue to offer the incentives and add new metal to the queues. Under QBWR, a warehouse could not warrant any new LME metal until the queue had been reduced below 50 days. This may 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.

56 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.

57 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.

Potential Issues in respect of QBWR

58 Issues that could be raised regarding QBWR include the following:

a. It might be argued that significant further action of this magnitude is not required to reduce the incentivisation of the load-in of metals to warehouses with queues. The LME understands that, in anticipation of LILO, queued warehouses have materially reduced the incentives paid to attract metal, given that LILO makes it less economical to load in large quantities of metal, since load-out requirements would increase in tandem. Indeed, in the case of one Affected Warehouse, load-in has broadly ceased altogether, in which case QBWR would not cause the queue to fall at any faster rate than presently.

b. QBWR would not cause currently-embedded queues to fall any more quickly than would occur under LILO (including the proposed amendment thereto), because existing metal (cancelled in queues, or uncancelled with potential to augment the queue once cancelled) is not 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 LILO), because LILO requires metal to be delivered in, in order to increase the rate of delivery out. As set out above, QBWR could in theory be implemented in conjunction with LORI.

c. 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.

d. 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 uncancelled 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 warrantholders 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.

Key parameters in respect of QBWR

59 In the example above:

a. 1 January 2016 has been notionally chosen as the start date of QBWR, in order to allow time for appropriate consultation and market notice as to its introduction.

b. 50 calendar days has been chosen as the queue threshold at which a warehouse may no longer accept metal for warranting so that it is aligned with the 50 day queue threshold under the LILO Rule. The reasoning is similar to that of the LILO Rule, namely the distinction between operational and structural queues. Queues over 50 days are viewed by the LME as structural, and so are precisely the queues which are designed to be targeted most vigorously by QBWR, as well as by the LILO Rule.

c. A 10 business day "grace period" has been chosen between the announcement to the market that a queue has accumulated at a warehouse, and the point at which metal can no longer be loaded-in. This time period has been chosen in order to provide metal owners planning to warrant metal at a particular warehouse for settlement with appropriate notice of that warehouse no longer being available for such warranting.

Discussion Point 3: Do you have any comments or feedback on the QBWR Discussion Item?

D. THE MODIFICATION TO THE SELLER'S OPTION ("MSO") DISCUSSION ITEM

60 An alternative to QBWR would be a modification to the seller's option, such that metal placed on warrant at a warehouse with a queue after a certain date in the

future may not be used in settlement of LME contracts until the queue has fallen below a queue threshold.

Construction of MSO

61 MSO could take the form of the addition of a new Part 6C of the LME Rulebook as follows:

Special Contract Rules for Metal in Queues

This Special Contract Rule shall apply only in respect of metal placed on Warrant after 1 January 2016. Metal placed on Warrant with a Warehouse Company in a particular Delivery Point at any time between (both dates inclusive):

(i) the eleventh Business Day following the publication of a Notice by the LME that a Queue of over 50 calendar days exists at that Warehouse Company in that Delivery Point for the withdrawal of that metal, and

(ii) the Business Day following the day of the publication of a Notice by the LME that such Queue had fallen to or below 50 calendar days

may not be used in settlement of a Contract until such time as the Queue at the Warehouse Company in the Delivery Point has fallen to or below 50 calendar days.

For the avoidance of doubt, once the Queue has fallen to or below 50 calendar days in respect of a particular metal at a particular Warehouse Company in a particular Delivery Point, all of that particular metal warranted by that particular Warehouse Company in that particular Delivery Point prior to such time shall become eligible for settlement of a Contract, even if a Queue of over 50 calendar days subsequently re-emerges. If metal is re-warranted, the applicable date shall be the date on which the metal was originally warranted.

In order to support Rule 6C, the following defined terms could be added to Part 1 of the Rulebook:

"Queue" means circumstances where load-out requests cannot be serviced immediately by a Warehouse Company, measured by the number of calendar days a metal owner cancelling a Warrant today must wait for a scheduled delivery slot;

"Warehouse Company" means a warehouse company which has entered into the relevant agreement with the Exchange and been accepted as such by the Exchange;

As with QBWR, a new Clause 6.3.4 could be added to the Warehouse Agreement:

6.3.4 On or before 30 December 2015, any Warehouse which will have a Queue of over 50 calendar days in a Delivery Point as at 4 January 2016 shall inform the LME of that fact. The LME shall, no later than 4 January 2016, disclose this fact to the market by means of a notice. In addition, on every occasion when a Queue of over

50 calendar days emerges or falls away at a Warehouse in a Delivery Point, the Warehouse shall inform the LME on the day of that occurrence. The LME will, no later than the following Business Day, disclose this fact to the market by means of a notice. For the avoidance of doubt, the trigger for such reporting shall be the time at which a metal owner requesting cancellation of a Warrant on the present date would be assigned a delivery slot on a date later than 50 days from the present (signalling the emergence of a Queue of over 50 calendar days), or a slot 50 days from the present or sooner (signalling the falling away of a Queue of over 50 calendar days).

62 It is anticipated that provision would be made in the LMEsword system, and the LMEsword Regulations, for the endorsement of warrants which would not be eligible for delivery as a result of MSO. Short position holders would be unable to provide warrants thus endorsed in the contract settlement process.

Benefits of MSO

63 The benefits of MSO are broadly comparable to QBWR, as set out above. 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.

64 It is worth noting that the seller's option delivery model of the LME[7] 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.

Potential Issues in respect of MSO

65 The market concerns in respect of MSO are broadly comparable to QBWR, save that MSO enjoins market participants in the regulation of queues at warehouses.

Key parameters in respect of MSO

66 The key parameters in respect of MSO are broadly comparable to QBWR.

Discussion Point 4: Do you have any comments or feedback on the MSO Discussion Item?

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

E. THE FUTURE QUEUE-LENGTH CONTROL ("FQLC") DISCUSSION ITEM

67 It could be possible to set a performance obligation on warehouses to deliver out metal within a certain number of days, without an accompanying cap on rents, i.e., future queue-length control ("FQLC"). FQLC would only apply to new metal loaded-in to warehouses.

68 This section sets out how FQLC might work in theory, and explains the LME's view on relevant factors.

Construction of FQLC

69 FQLC could operate by having a date, say 1 April 2018 (the "FQLC Initiation Date"), after which warehouses would be subject to an overarching performance obligation, in respect of metal which was originally warranted on or after 1 April 2016 (the "New Metal Date"). Metal warranted after the New Metal Date would be "New Metal". The performance obligation would require New Metal to be loaded-out within 50 calendar days of cancellation (the "FQLC Performance Obligation"). If the FQLC Performance Obligation is not met, the Warehouse would face potential sanction under the Warehouse Agreement in accordance with the Disciplinary Procedures which form part of the Warehouse Agreement.

70 Metal which has been cancelled and then re-warranted would be regarded, for the purposes of FQLC, as having been originally warranted on the date it was first loaded-in to the warehouse, not the date on which it was re-warranted.

71 This requirement would run in parallel with the existing requirements (daily load-out, nickel and tin, cobalt, molybdenum, steel billet, non-dominant and LILO, as well as the aluminium alloy rule – together the "Pre-FQLC Daily Load-Out Requirement"). Accordingly, a Warehouse would be required to continue to respect the Pre-FQLC Daily Load-Out Requirement. However, to the extent that the Pre-FQLC Daily Load-Out Requirement is insufficient to ensure that metal owners receive metal within 50 calendar days, then the Warehouse would need to schedule additional load-out to ensure load-out within such timeframe in order to meet the FQLC Performance Obligation.

72 Warehouses would continue to be required to respect cancellation time priority, regardless of the age of the metal in the queue. Accordingly, it would not be permissible for a Warehouse to accelerate the load out of New Metal ahead of non-New Metal in order to avoid sanction.

73 Under the Warehouse Agreement, Warehouses are required to expedite load-out at the minimum rates published from time to time by the Exchange. Failure by a

Warehouse to comply with the Warehouse Agreement may result in disciplinary action against it by the LME. Therefore if a Warehouse fails to meet the FQLC Performance Obligation, then the LME may bring a disciplinary action against it. If a disciplinary committee convened under the Disciplinary Procedures finds that the Warehouse has committed an act of misconduct, then it has the power to impose the following sanctions:

a. a warning or reprimand;

b. a fine;

c. a requirement to comply with such terms and conditions as appropriate;

d. the withdrawal, either temporarily or permanently, of listed warehouse status; and/or

e. such other penalty as the disciplinary committee shall think fit, including a fine or other sanction unless the Warehouse remedies a default within a given period.

74 FQLC would operate in parallel with the LME's other powers under the Warehouse Agreement, including Clause 9.3. In particular, it would theoretically be possible, even under an FQLC model, for a warehouse to incentivise metal into storage, announce a very large increase in daily rents in the annual rent cycle, and then extract a significant profit even from a 50 calendar day queue. However, this would be indicative of the warehouse engaging in behaviour which has the effect of creating or maintaining a queue, and/or which has led to market manipulation or distortion, or otherwise creating or maintaining a disorderly market. Therefore the LME could exercise its powers to impose additional load-out requirements and/or take disciplinary action.

75 The FQLC Rule would contain a right for the LME Special Committee to modify or waive the FQLC Performance Obligation for such period as it considers necessary in order to prevent the development or likely development of an undesirable situation which in its opinion has affected or is likely to affect the market.

76 As stated above, FQLC would only apply to New Metal. The LME does not think 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. It is unlikely that such warehouses would have the capacity to load out such large stocks of metal within 50 days.

Benefits of FQLC

77 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 warrantholders would be protected by the FQLC Rule, and warrantholders would receive their metal within 50 days, failing which the relevant warehouse might be subject to disciplinary proceedings.

78 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 eligible for the protections afforded by the FQLC Performance Obligation. As such, FQLC could disincentivise the creation of new queues.

Potential Issues in respect of FQLC

79 FQLC would not have any effect on existing queues[8]. As such, FQLC could only be a forward-looking complement to LILO (including the proposed amendment thereto) and other rules designed to address queues.

80 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.

81 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).

Key parameters in respect of FQLC

82 In the example above:

a. 1 April 2018 has been identified as the FQLC Initiation Date because, on the basis of the LME's modelling, the LILO Rule (including the proposed

[8] As set out above, the LME does not think 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.

amendment thereto) would be expected to have reduced queues to under the 50 day Queue Threshold by that date. However, the LME will keep this date under review given that the amendment to the decay factor proposed in the current consultation may accelerate the rate of queue decay. This is an important issue because, if such queues were still in existence, the requirement for cancellation time priority would make it more difficult for warehouses to meet the FQLC Performance Obligation in respect of New Metal, as non-New Metal may sit in front of New Metal in a queue.

b. The New Metal date has been identified in order to provide sufficient visibility to warehouse operators in respect of the obligations which would attach to the load-in of New Metal. In particular, certain warehouse operators may have entered into forward agreements to load in metal, and it is hence appropriate to provide a sufficient period of time to ensure that warehouse load-in is on the basis of a full understanding of the prevailing performance obligations.

c. It is thought that the FQLC Performance Obligation could be set at 50 days. It is thereby aligned with the 50 day Queue Threshold under the LILO Rule. Queues over 50 days are viewed by the LME as structural, and ones that are therefore to be targeted most vigorously.

Discussion Point 5: Do you have any comments or feedback on the FQLC Discussion Item?

F. THE WARRANTHOLDER BEHAVIOUR DISCUSSION ITEM

83 As stated in the 2013 Consultation Report, it is possible that warrantholder behaviour could contribute to the creation and / or elongation of queues at warehouses. This could occur by 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. The LME has considered a mechanism aimed at addressing this.

Construction of WB

84 A provision could be added to the warehouse agreement as clause 1.5.3 as follows, which could come into effect on 1 January 2016:

1.5.3 A Warehouse may not accept and schedule one or more requests for load-out from an owner of metal, or two or more owners of metal acting in concert, for more than 100,000 tonnes of metal in any given location at any given time. In addition, in the event that a Warehouse receives one or more requests for load-out of metal cumulatively totalling more than 75,000 tonnes in any given location at any given time from an owner of metal, or two or more owners of metal acting in concert, the

Warehouse may not accept and schedule any further requests for load-out from the party or parties making the request for at least 30 days. The Warehouse shall report any requests for load-out in excess of the thresholds set out in this Clause 1.5.3 to the LME as soon as reasonably practicable. In the event that the Warehouse is uncertain about whether two or more owners of metal are acting in concert, it shall request further information from the parties concerned, and shall inform the LME that it has done so. The Warehouse may also request that the LME assist in obtaining further information, where one or more of the parties is an LME Member. For the avoidance of doubt, material re-warranted at the request of an owner of metal may be deducted from cancelled amounts for the purposes of the limits set out in this clause.

85 This provision would propose a limit on the amount of metal which a warehouse could accept for cancellation and load-out by any one warrantholder, or any two or more warrantholders acting together, at any one time. For the purposes of the present discussion the figure for this limit is 100,000 tonnes (the "Cancellation Limit"). On the basis of the LME's reasonable calculations, the LME thinks that this level would be far in excess of the amount of material which could reasonably be required for any immediate purpose.

86 This provision additionally includes the introduction of a "cooling-off" period for any cancellations and load-out requests received by a warehouse from one or more warrantholders cumulatively totalling over 75,000 tonnes (the "Cooling Off Period Trigger"). In other words, once that limit is passed, the warehouse may not accept and schedule any further requests for load-out from the party or parties making the request for at least 30 days (the "Cooling Off Period").

87 The warehouse would report any requests for load-out in excess of the 100,000 and 75,000 tonne thresholds set out in Clause 1.5.3 to the LME as soon as reasonably practicable.

88 In the event that a warehouse is uncertain about whether two or more owners of metal are acting together, the warehouse might request further information from the parties concerned. In addition, the warehouse would be required to inform the LME that it has requested further information, in order to assist the LME Regulation & Compliance Department in monitoring the market. The LME Regulation & Compliance Department would also be able to assist warehouses in obtaining further information, where one or more of the parties is an LME Member, or to make its own enquiries as necessary.

Benefits of WB

89 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.

90 WB could provide some protection for warehouses, particularly if rules relating to QBRC or FQLC were to be implemented. In theory, if a warrantholder 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 warrantholder 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.

91 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.

Potential Issues in respect of WB

92 WB might impact upon the market in the following ways:

a. WB may be perceived to constrain a warrantholder’s ability to take delivery of metal as it sees fit. In particular, a warrantholder 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;

b. WB only addresses warrantholders 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 warrantholders are not acting together;

c. it may be difficult for a warehouse to identify when two or more warrantholders 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 in order to give the warehouse company enhanced rights

to request information to allow it to comply with the due diligence requirement; and

d. equally, it may be difficult for the LME to request further information from certain warrantholders. 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.

Key parameters in respect of WB

93 In the example above:

a. The Cancellation Limit is 100,000 tonnes, and the Cooling Off Period Trigger is 75,000 tonnes. On the basis of the LME's reasonable calculations, these levels appear to be far in excess of the amount of material which could reasonably be required for any immediate purpose. However, looking at previous cancellations and data related to queues, these could be appropriate levels to assist in the prevention of future queue-accumulation.

b. The Cooling Off Period is 30 days. This would give sufficient time to deliver out material and reduce the effect of sudden cancellation (although the LME notes that 30 days would likely not be sufficient to reduce entirely a queue created by a cancellation of 100,000 tonnes).

c. 1 January 2016 has been notionally chosen as the start date of WB, in order to allow time for appropriate consultation and market notice as to its introduction.

Discussion Point 6: Do you have any comments or feedback on the WB Discussion Item?

G. THE PROPORTIONATE INCREASE IN LOAD-OUT RATE ("PILOR") DISCUSSION ITEM

94 A simple and effective method of ensuring that, in future, queues could not arise, would be to introduce a significant increase in load-out rate, proportionate to the stock held by a warehouse. Such a rule would not take effect until current queues had been reduced below the queue threshold.

Construction of PILOR

95 The table below provides an example of a revised load-out rate based on a proportion of total stock (tonnes) which could be used in parallel with the LILO Rule (including the proposed amendment thereto).

Total stock (tonnes)	**Daily minimum load-out rate (tonnes)**
100,000 to 199,999	2,000
200,000 to 299,999	3,000
300,000 to 399,999	4,000
400,000 to 499,999	5,000
500,000 to 599,999	6,000
600,000 to 699,999	7,000
700,000 to 799,999	8,000
800,000 to 899,999	9,000
900,000 +	10,000

96 The above table would replace the second table in Section C2 of the Policy on Approval of Warehouses (which would then take effect for DP Warehouses with stock over 100,000 tonnes). The other requirements relating to load out that are set out in that Section (including dominant metal, nickel, tin, RMC, cobalt, steel etc, together with the amendments in Notice 15/070 : A069 : W023) could also be reviewed. The revised requirements would take effect from 1 April 2018.

97 As with LORI, the LME acknowledges that there are potential logistical concerns associated with imposing a quantitative load-out increase on this scale. The LME notes that the proposed rates for PILOR are significantly higher than for LORI. The LME is therefore of the view that PILOR could only be implemented following an appropriate period so as to allow (a) warehouses to implement the necessary logistical changes and reduce their stock if necessary, and (b) LILO to reduce the queues below the queue threshold of 50 days.

Benefits of PILOR

98 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 FQLC[9]. 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.

Potential Issues in respect of PILOR

99 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.

100 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.

101 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.

102 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.

103 It is also a concern that a higher load-out rate would result in a quicker dispersal of metal from warehouses into the marketplace. As such, there is the danger of releasing a larger quantity of historical overproduction into the global market, which may create a short term surplus of metal. This would have the effect of driving-down

[9] Although note that FQLC and PILOR are not necessarily mutually exclusive.

prices in the short term, with consequent impact for both metal stockholders and the broader supply-demand dynamic.

Key parameters in respect of PILOR

104 In the example above

a. 1 April 2018 has been identified as the date for introduction of PILOR because this gives time for (a) warehouses to implement the necessary logistical changes and adjust their stock if necessary, and (b) LILO (including the proposed amendment thereto) to reduce the queues below the queue threshold of 50 days.

b. The sliding scale of load-out requirements based on tonnage stored is set according to the LME's preliminary view of the requirements which warehouse operators could reasonably implement given the necessary time to put in place logistical changes and adjust their stocks if necessary.

Discussion Point 7: Do you have any comments or feedback on the PILOR Discussion Item?

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

105 The final Discussion Item, CC, would address the levels of rent and FOT charged by warehouses.

H. THE CHARGE-CAPPING ("CC") DISCUSSION ITEM

106 This section sets out how CC might work.

Construction of CC

107 CC could operate by the LME commissioning an external consultant (the "Charge Cap Consultant") to produce a schedule of maximum charges (rent and FoT, collectively the "Maximum Charge Schedule") which may be levied in respect of each particular metal in each particular Delivery Point.

108 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.

109 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.

a. The Maximum Charge Schedule would be published to the market on 1 October of each year, commencing on 1 October 2016.

b. Warehouse operators wishing to dispute any particular maximum charge would be required to submit an official dispute, including a full economic rationale, by 14 October of the year in question. 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 Maximum Charge Schedule) by 1 November of the year in question.

d. Warehouse operators would then submit their schedule of charges (for the period 1 April of the following year to 31 March of the second following year) to the LME, as at present, by 1 December of the year in question. 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 by 31 December of the year in question.

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 by the Charge Cap Consultant 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. 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 an additional levy (the "Charge Cap Calculation Cost Levy") on the rents of warehouse operators. This is considered to represent the most equitable approach to assigning charges to warehouse operators based on size. The Charge Cap Calculation Cost Levy would be calibrated at the end of the rent year, based on the rent actually collected by warehouses and the actual Charge Cap Calculation Cost.

Benefits of CC

110 CC would benefit warrantholders, who would be assured of some protection against rising rent and FOT rates.

111 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 previously noted, 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 to control this by limiting the amount by which warehouse operators could increase their FOT rates.

Potential Issues in respect of CC

112 The LME has a number of concerns regarding how CC might impact upon the market:

a. As explained above (see "Market concerns in respect of QBRC"), the risk of challenge could have a material impact of the orderly functioning of the market for a significant period of time;

b. CC could render the business of LME warehousing less attractive than at present for any warehouse operator currently levying charges above the charge cap. As such, there may be a risk to warrant holders and the market more generally that the market operates less efficiently as a result. In extremis (although perhaps unlikely), warehouse operators may exit the market, hence reducing the provision of LME warehousing services, and rendering 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; and

c. increased charges. 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.

Key parameters in respect of CC

113 In the example above, a Return Multiplier of 2x the return on capital demanded by comparable public peers in the logistics space seems to be a reasonable benchmark to use for the purpose of constructing the Maximum Charge Schedule.

Discussion Point 8: Do you have any comments or feedback on the CC Discussion Item?

Discussion Point 9: Are there any other matters you wish the LME to consider in the context of any aspect of this discussion paper?

Matthew Chamberlain
Head of Business Development

cc: Board directors
User Committee
All metals committees
Physical Market Committee
Warehouse Committee

ANNEX

Competition Law Implications & Risk of Challenge relating to QBRC or CC

1 This Annex sets out the LME's views on the risk of challenge to QBRC or CC on the basis of competition law, and explains why, historically, the LME has not viewed QBRC or CC as viable options.

2 Where, as in the case of QBRC or CC, there is an agreement between two or more parties containing provisions relating to the conditions under which the parties may purchase, sell or resell certain goods or services, competition law considerations may arise. Competition laws seek to ensure that such agreements are not used to restrict or distort competition on the market to the detriment of consumers. There are various competition law regimes that may be applicable to QBRC or CC worldwide, including regimes in the US and the EU.

3 As to the position in the EU, undertakings contemplating an arrangement must first assess the legality of their actions in such a way as to enable them to take an informed decision on whether to go ahead with a particular agreement or practice and in what form (commonly referred to as a "self-assessment").[10] Secondly, undertakings must assess the likelihood of others challenging their arrangements through litigation in the courts or complaints to competition authorities on a vexatious basis or on a nothing to lose/everything to win basis, regardless of how strong the undertaking is in its own view that its conduct and/or the arrangement are competition law compliant. This assessment of the legality of its actions is something that the LME must make on its own: there is no entity that can make an assessment of these issues for the LME that will be binding.

4 In Europe, it is for the party or the authority alleging an infringement of Article 101(1) and/or Article 102 of the Treaty on the Functioning of the European Union ("TFEU") to prove the existence of such an infringement to the requisite legal standard. It is for the undertaking invoking the benefit of a defence against an allegation of infringement, for example pursuant to the Article 101(3) TFEU exception from the prohibition of agreements that restrict competition under Article 101(1) TFEU, to demonstrate to the requisite legal standard that the conditions for applying such defence are satisfied.

5 In this regard, the European Commission is legally empowered to apply the exception in Article 101(3) TFEU to certain categories of agreements. Pursuant to

[10] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty OJ[2003] L1/1.

this authority, the Commission has adopted so called "block" exemption regulations by which it has declared Article 101(1) TFEU inapplicable to certain categories of agreements. One of these is the Vertical Agreements Block Exemption Regulation ("VABE")[11], which declares Article 101(1) TFEU to be inapplicable to vertical agreements provided the market share of the relevant parties does not exceed a certain threshold, and the agreement does not include any provisions that are prohibited by the VABE.[12]

6 The LME considers that it has repeatedly carried out self-assessment of the type described in paragraph 3 above in respect of the possibility of rents and FoTs being capped as envisaged by QBRC and CC. The LME's current assessment is that the likelihood of others seeking to challenge QBRC or CC through litigation in the courts (or via complaints to competition authorities), regardless of the merits of any such challenge, is high. The objective of such litigation may be to obstruct and delay changes, or alternatively to ultimately prevent such changes.

7 As noted above (see particularly "Potential Issues in relation to QBRC"), litigation in relation to the implementation of QBRC or CC would likely take a significant period of time to resolve. During this period, the market would be uncertain about whether or not QBRC or CC was going to be implemented. Given the potential immediate impact on the LME price of metal which QBRC or CC would have, a significant period of uncertainty about whether or not the proposed rule would be implemented would be likely to risk endangering the orderly functioning of the market.

8 Furthermore, the LME has been the subject of litigation in the UK and the US, and the subject of previous complaints to competition authorities. Such litigation would require significant management time and resource to defend. The LME would need to ensure that it has appropriate arrangements and resources in place to defend itself against such challenges, to carry on with the effective operation of the LME market in the short to medium term, and to ensure that it continued to satisfy its regulatory obligations.

9 Together, these factors have historically inclined the LME towards not pursuing QBRC and/or CC.

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[11] Commission Regulation (EU) No 330/2010.

[12] Article 1 of the Vertical Agreements Block Exemption Regulation defines a "vertical agreement" as an agreement or concerted practice entered into between two or more undertakings each of which operates, for the purposes of the agreement or the concerted practice, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services.

10 The LME notes that the litigation / investigation risk in relation to QBRC might be materially reduced if it was only made applicable to metal placed on warrant in the future. The LME understands that certain warehouses may have committed significant funds to paying incentives, with an expectation of recouping such expenditure through the rent received in respect of such metal whilst on warrant and in the queue.

11 The US has a different competition law regime to that in the EU. However, a global warehousing network requires global rules, and it is not desirable to create region-specific requirements. In addition, applying QBRC or CC only in the US might increase the value of warrants at US warehouses (due to the lower frictional costs of converting the warrant to a free metal) relative to the value of warrants at locations outside the US. Sellers on the LME will typically deliver the lowest-quality warrant, and therefore the most likely impact would be for LME settlement to be effected primarily in warrants in queued warehouses outside the US, with US warrants no longer appearing regularly in settlement. Accordingly, there could be a potentially detrimental impact to the LME's global price discovery mechanism. Thus, simply the fact that QBRC or CC may be less likely to be challenged in the US does not suggest a different outcome in terms of the LME's overall self-assessment of litigation or investigation risk.

12 On the other hand, the LME notes, as set out above, that by not taking action to address the persistence of queues at two warehouses and the dislocation between the LME price and the price of equivalent metal in the physical market, there could continue to be a threat to the smooth and orderly functioning of the market and that the LME might not be able to ensure that it could continue to satisfy its regulatory obligations. The LME might also face continuing and further litigation from other parties to address such concerns which would have the same effect as the litigation above in relation to the LME's ability to implement further reforms. The LME is interested in the views of the market as to whether such orderly operation is sufficiently under threat to warrant the LME bearing a degree of litigation / investigation risk in order to implement QBRC or CC over and above (or in conjunction with) any of the other options set out in this paper.