LONDON METAL EXCHANGE

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

Ref: 15/068 : A068 : W021

Date: 2 March 2015

Subject: **UPDATE ON LME PHYSICAL NETWORK REFORM**

Summary

1. This Notice updates on the LME's physical network reform package.

Background

2. As a result of the consultation undertaken in 2013 (the "2013 Consultation"), the LME announced (in Notice 13/326 : A312 : W125) a 12-item reform package designed to ensure that the LME's physical delivery network continues to support the LME's positioning as the natural venue of choice for global metals trading.

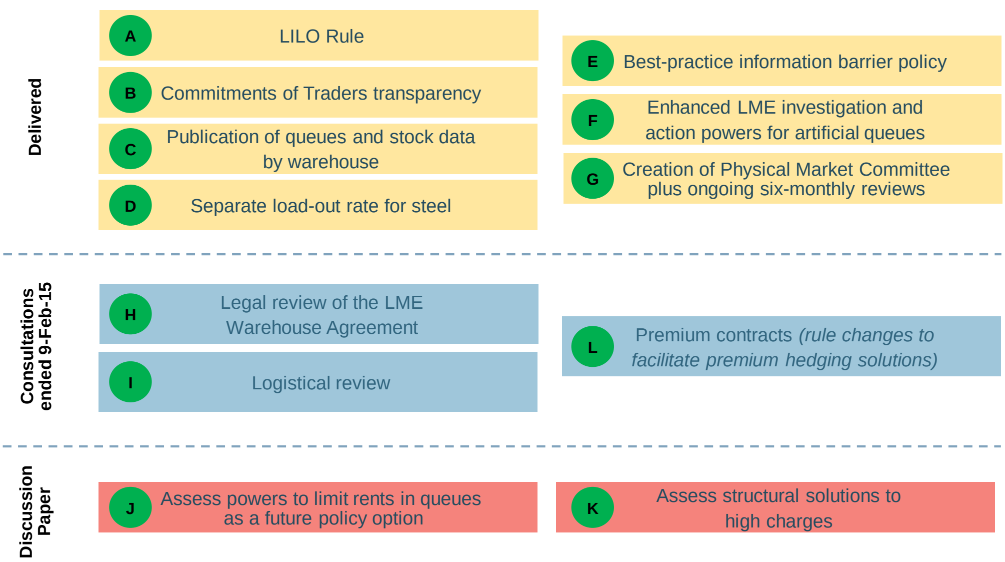

Figure 1 – the LME's reform package

3. The process of the LME's physical network reform has necessarily been one of continuous delivery, given the need to complete certain items before embarking on others, and the delay caused to certain initiatives by the judicial review action against the LME, despite the LME's eventual victory in such proceedings and finding by the Courts that the LME's consultation process had been conducted in a correct manner. However, throughout the process, the LME has delivered its reform package consistent with the roadmap set out as a result of the 2013 Consultation.

4. 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. The LME must demonstrate and provide assurance to the FCA

on an ongoing basis that it has arrangements in place to ensure that its warehousing arrangements operate in a way that enables the LME to continue to satisfy its regulatory obligations. Throughout the reform process, the LME has been consistent to its stated aim, namely to reduce existing queues in the LME network, and to prevent the occurrence of new queues. The LME is clear that the effect of queues is to cause the LME price to trade at a discount to the "all-in" price of metal, which is observed by the market as a premium to the LME price. The impact of this premium is to reduce the efficiency of price discovery and hedging on the LME.

5. The LME fully accepts that its reform process has resulted in greater regulatory requirements for market participants in general, and warehouse operators in particular. However, the LME views this as being consistent with its regulatory responsibilities to the global metals market – in particular, to combat potentially abusive practices and to ensure the orderly functioning of its market. The LME is grateful to warehouse operators and others for their constructive and cooperative engagement on these topics.

Delivered items

A. The Linked Load-In / Load-Out ("LILO") Rule

6. Following a delay caused by judicial review proceedings, the LILO Rule came fully into effect on 1 February 2015. The effect of LILO is to cause warehouses with queues to load out more than they load in, which will cause stocks – and eventually queues – to fall. Key dates in respect of LILO are as follows:

- The Preliminary Calculation Period, during which warehouses with queues were incentivised to keep their load-in and load-out in-balance, ran between 1 July 2013 and 31 January 2015. The LME is pleased to note that all queued warehouses demonstrated net load-out during this period, which stopped stocks from growing

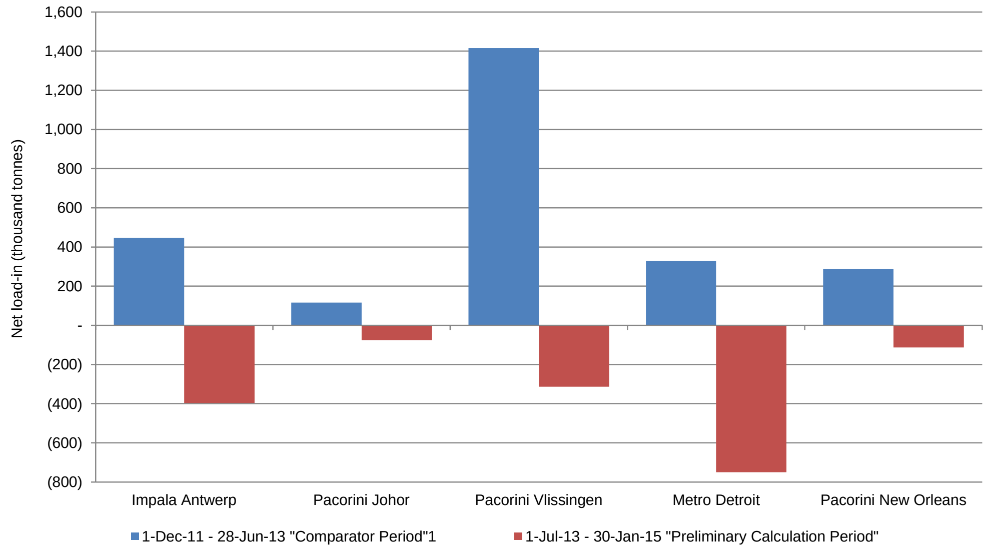

Figure 2 – net load-in / load-out for warehouses with queues on 1 July 2013[1]

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[1] Comparator Period is a period of the same duration as the Preliminary Calculation Period (19 months) ending on the business day before the Preliminary Calculation Period begins.

- The First Calculation Period runs between 1 February 2015 and 30 April 2015. Following a one-month scheduled adjustment period, the First Discharge Period will run between 1 June 2015 and 31 August 2015. Once the First Discharge Period has commenced, affected warehouses will be required to load out more than they loaded in, until their queues have fallen below 50 days

7. The consequent impact on queues at affected LME warehouses can be clearly seen, with queues having fallen away at 3 of the 5 affected warehouses[2], and queues have stabilised – and are now falling – at the remaining two warehouses. The rate at which the these queues would be expected to fall is driven by LILO, although will also be impacted by (i) whether warehouse operators continue to load in[3], and (ii) the cancellation behaviour of warrantholders. However, the LME believes that the market appreciates the certainty provided by LILO as to the fact that queues will, over time, reduce.

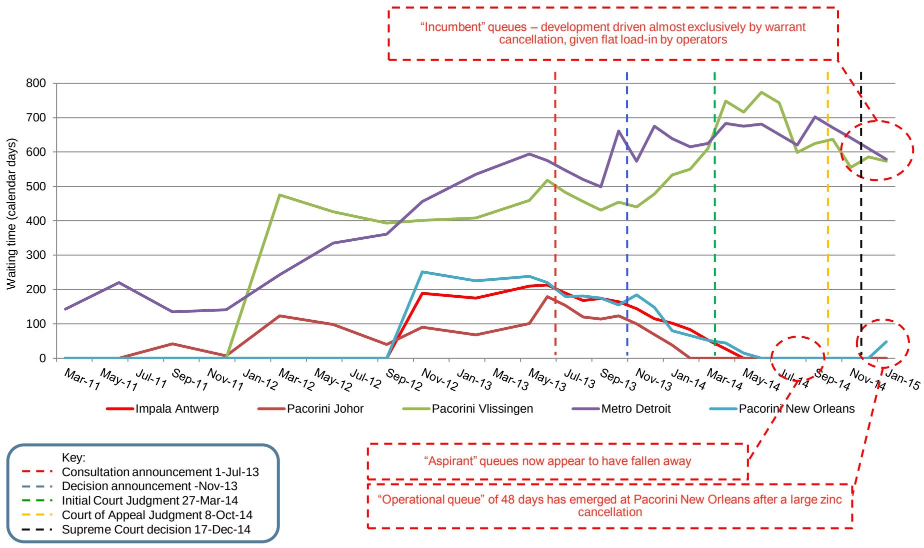

Figure 3 – development of queues at LME warehouses[4]

8. Certain market commentators have suggested that the LILO Rule is no longer required, and have taken the view that improving macroeconomic conditions are primarily responsible for the change in warehouse behaviour and queue development. The LME does not seek to minimise the impact of economic factors – however, it is clear from Figure 4 that the announcement of the LILO Consultation on 1 July 2013 caused an immediate and significant change in the behaviour of warehouses with queues. Additionally, Figure 5 shows the significant behavioural divergence between queued and non-queued warehouses during 2014, from which it can clearly be seen that those warehouses subject to LILO loaded out a far greater multiple of their load-in than the LME warehousing market as a whole. Accordingly, the LME is confident in stating that the effect of LILO is to reduce stocks, and hence queues, at warehouses with queues.

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[2] An "operational queue" has emerged at Pacorini New Orleans due to a zinc cancellation, but this is not expected to grow to become a "structural" queue.
[3] Although LILO requires affected warehouses to load out more than they load in, the size of the net load-out will be greater if warehouses cease load-in altogether.
[4] Data as of 31-Jan-15.

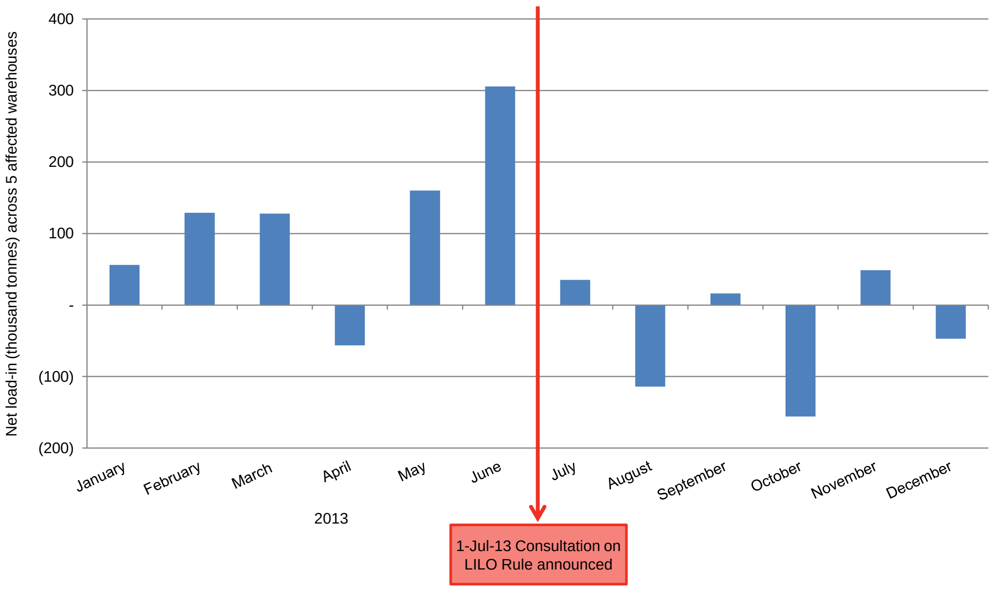

Figure 4 – behaviour of affected warehouses in 2013[5]

	METRO DETROIT / PACORINI VLISSINGEN	ALL OTHER LME LISTED WAREHOUSES	TOTAL
GROSS LOAD-IN 2014	541 ktonnes	1,338 ktonnes	1,879 ktonnes
GROSS LOAD-OUT 2014	1,711 ktonnes	1,729 ktonnes	3,441 ktonnes
LOAD-OUT / LOAD-IN	**3.2x**	**1.3x**	**1.8x**

Figure 5 – queued vs. non-queued warehouse behaviour in 2014[5]

9. However, the LME notes comments from stakeholders that – particularly given the delay to the introduction of LILO caused by judicial review proceedings – the rate at which queues are expected to fall under LILO is unlikely to be sufficiently rapid. Indeed, the persistence of queues may affect the LME's assurance to the FCA that its warehousing arrangements are operating in a way that enables it to satisfy its regulatory obligations. Accordingly, the LME proposes to increase the rate at which queues are expected to fall by adjusting the "decay

[5] 2013 analysis on basis of affected warehouses as at 1-Jul-13; 2014 analysis on basis of affected warehouses as at 31-Dec-14.

factor" under LILO from 0.5x to 1.0x. In simple terms[6], a decay factor of 0.5x requires LILO to be in effect for two days to remove one day of queues, whereas a decay factor of 1.0x requires LILO to be in effect for one day to remove one day of queues. Accordingly, with other factors being equal, the effect of this change will be to cause queues to fall twice as quickly (provided affected warehouses continue to load in metal).

10. The LME specifically envisaged the use of the decay factor as a policy lever, and the LILO Rule gives the LME the power to adjust the decay factor in order to enhance the orderly functioning of the market – and, given the views of the market, the LME believes it appropriate to now utilise this power. Accordingly, the LME is today proposing this course of action by way of a consultation (Notice 15/071 : A070 : W024).

B. Commitments of Traders ("CoT") transparency

11. The CoT Report was first published on 5 August 2014 (one report for each day of the previous week Monday 28 July – Friday 1 August 2014), and has since been freely provided to the market on a weekly basis on LME.com. The data is also redistributed by a number of market data vendors.

12. The LME understands that certain market participants wish to see further information published as part of the CoT Report, including a more granular classification of market users, and also data in respect of trading volumes (in addition to the current open interest data).

13. The format of the LME CoT Report was designed to match that of other exchanges (in particular, the format prescribed by the CFTC in respect of the exchanges which it regulates, and which has also been adopted by other European exchanges). The LME would note that any expansion of the set of published data involves a technical cost to the Exchange, and possibly also to Members if further classification work is required. Furthermore, the LME would need to be satisfied that the publication of a broader set of data did not confer an unfair trading advantage on those more sophisticated market participants capable of automatically analysing such data immediately after publication, and constructing trading strategies on the basis of such analysis.

14. Notwithstanding the above, where feasible from a technical and regulatory perspective, the LME is willing to work with the market to optimise its reporting, including in respect of the CoT Report. However, any such decision would need to be made on the basis of a consensus market perspective, rather than the views of any individual participant. Accordingly, the LME believes that the Physical Market Committee represents the best forum for the consideration of the merits of further information publication.

15. This issue has already been considered by the Physical Market Committee at its October meeting, and it was proposed and agreed that Committee members would provide feedback to the Executive ahead of a more detailed discussion at the meeting to be held on 19 March 2015 As such, this item is on the Committee's March agenda – and, in particular, to give those market participants who support broader publication the opportunity to advocate their position. The LME will update the market on the result of such discussions.

16. The LME notes that the classification of market participants for the purposes of the CoT Report is the responsibility of Members, and necessarily involves a degree of subjective judgment.

[6] In particular, considering a warehouse which continues to load in metal at a rate equal to its pre-LILO load-out requirements.

The LME continues to work with Members to ensure the quality and consistency of such classifications remain high.

C. Publication of queues and stocks data by warehouse

17. This information was first published on 12 May 2014 (for April 2014 data), and has since been provided to the market on a monthly basis. The LME understands that this data is extremely useful to market participants.

18. In order to enhance distribution of the data, the LME is providing permission to data vendors to include this information in their LME data packages. For the avoidance of doubt, the information will continue to be freely available on LME.com.

D. Separate load-out rate for steel

19. Following the introduction of a separate load-out rate for steel billet on 1 April 2014, and the LME's re-regionalisation of the contract to Europe, the LME's physically-settled steel billet contract continues to demonstrate strong price convergence.

20. Following discussion with industry, the LME has announced its intention to launch a suite of cash-settled steel products, starting with European rebar and scrap. In order to enhance connectivity testing efficiencies for market participants, these will be launched in parallel with the LME's premium hedging contracts, on 26 October 2015[7].

21. The LME is engaging with market participants to discuss details of the contracts, including the selection of the market's preferred index provider, the LME's proposed market-making programmes, and volume trader discounts. Any interested market participants are requested to contact Marko Kusigerski (marko.kusigerski@lme.com / +44 20 7423 5985) for further information.

E. Best-practice information barrier policy

22. In Notice 14/202 : A195 : W098, the LME implemented an amended policy regarding the information barriers required between warehouse companies and trading companies in the same group, following a review by external counsel. The LME continues to take the view (as supported by the conclusions of the external review) that its information barriers provide best-practice protection against information leakage between warehouse operators and trading companies within the same group.

23. The LME would note that there may exist economic benefits to trading companies owning warehouse operators, including the ability for the trading company to finance metal held in the warehouse, and the ability for the warehouse operator to provide discounted storage for the trading company or its clients. However, these follow naturally from a group structure, and the LME does not believe that it has the power to ban trading companies from owning warehouse operators. Accordingly, the LME's focus is on the maintenance of best-practice information barriers, which is achieved via its current policies.

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[7] This date remains subject to required regulatory approval for both LME and LME Clear.

F. Enhanced LME investigation and action powers for artificial queues

24. As of 1 April 2014, the LME has had specific power to take action against the payment of incentives by warehouses which are designed to create or maintain queues. The LME actively monitors the development of existing queues, and potential emergence of new queues, and the LME's Special Committee is provided with a regular update on this topic. To date, the Special Committee has not proposed taking action, but the LME believes that the existence of this power has contributed materially to the change in load-in behaviour at queued warehouses as set out above, and the Special Committee continues to monitor this on an ongoing basis.

G. Creation of the Physical Market Committee plus ongoing six-monthly reviews

25. The Physical Market Committee continues to meet quarterly, and represents a valuable forum for the consideration of issues in respect of the physical network. In particular, the LME is requesting the Committee to consider at its March meeting a number of important topics, including potential extensions to the CoT Report, the possibility of "staging areas" in LME warehouses, the publication of capacity information by warehouse or location, and the continued effectiveness of the LME's lending guidance. Where appropriate, these issues are also considered by the Warehousing Committee.

26. The LME views warehouse operators as a core element of its physical market infrastructure. Accordingly, and following consultation with the Chairman of the Physical Market Committee, the LME is inviting the Warehousing Committee to nominate a representative to the Physical Market Committee. The Warehousing Committee will be asked to discuss the most effective form of representation and, provided acceptable to the Chairman of the Physical Market Committee, the Warehousing Committee representative will be appointed to the Physical Market Committee by the LME. The LME expects that this will further strengthen the links between these two important committees.

27. In addition, the LME is pleased to announce that Fabian Somerville-Cotton, Chairman of the Warehousing Committee, has accepted a place on the User Committee. The LME believes this will provide another conduit for the views and concerns of warehouse operators to be raised within the LME's governance structure.

28. The LME additionally committed to consider the operation of LILO on a six-monthly basis. Given delays in implementation, the first such review will take place on or around 1 August 2015 (six months following the introduction of LILO).

Consultation outcomes announced today

H. Legal review of the LME Warehouse Agreement

29. Notice 15/069 : W022, published today, sets out the LME's decisions following the market consultation on proposed changes to the LME's Warehouse Agreement. These proposed changes follow a review of the Agreement by external counsel, with the aim of ensuring that the LME holds all of the powers necessary to investigate and take action against abusive market behaviour.

30. Significant discussion took place in the consultation in respect of incentives, i.e. sums paid by warehouse operators to metal owners with the aim of attracting metal into warehouses. The LME has always taken the view that incentives which are abusive are not acceptable, and will require warehouses to report incentives to the LME, so that such activity can be more effectively monitored. The LME believes this is crucial in order to ensure an orderly market.

31. In response to consultation feedback from warehouse companies, the LME is today describing the types of incentives which it believes are paid in the market, and explaining its views on each. Furthermore, while the LME will require warehouses to report the incentives paid to metal owners, this reporting will be conducted on an anonymous basis, to protect the identity of underlying clients.

32. The LME has also clarified that it is not proposing to publish off-warrant stocks in LME warehouses – rather, it is merely clarifying its power to have access (on a confidential basis) to this type of information if necessary to conduct an investigation. As a general point, the LME does not believe that the publication of "off-warrant" or "eligible" stocks is useful for the market, given that a metal owner wishing to avoid publication of stocks always has the option of storing metal in a non-Exchange registered shed, with the metal able to be moved to the Exchange-registered shed and warranted at very short notice.

I. Logistical Review

33. Notice 15/070 : A069 : W023, published today, sets out the LME's decisions following the market consultation on proposed changes to the LME's policies in respect of its physical network. These proposed changes follow the production of a report by external management consultants Oliver Wyman, and broadly codify the proposals made in that report, taking into account comments received in the consultation.

34. In general, the LME's proposed changes were well-received by the market, and were seen as helpful clarifications and developments of the LME's logistical network procedures.

35. The key point of discussion in the consultation was in respect of the LME's proposed definition of "load-out". The market will be aware of allegations of "merry-go-round" trades, whereby metal is loaded-out of LME storage and immediately loaded back in to the same facility, with the aim of offsetting load-out requirements. In order to ensure this behaviour does not take place, the LME is proposing that – in order to qualify as "load-out" – metal must be shipped either to different control in the same LME location (a different warehouse operator, or for consumption), or it must leave the LME location. The LME thinks this will remove, or at least considerably dilute, the attraction of "merry-go-round" transactions.

36. In general, the market is supportive of this approach. However, some warehouses and metal owners have stated that – after loading-out metal at an LME warehouse – they would like to be able to use non-LME storage at the same warehouse, which would not be allowed under the rules as currently formulated. The LME believes that this service should be able to be offered provided that it can be proven that the metal does subsequently leave the warehouse, and hence that "merry-go-round" transactions cannot take place. Accordingly, the LME will work with its Warehousing and Physical Market Committees to try to draft rules acceptable to all market participants in this specific respect. However, the LME restates its overriding position that any potentially abusive metal transfers must not be permitted.

37. The LME also confirms that it will proceed with a separate load-out rate for Aluminium Alloy and NASAAC. This is consistent with the Exchange's recommitment to these contracts, given their importance particularly for the die-casting and automotive industries. The LME expects that the separate load-out rate will ensure better price convergence for these contracts, and forms part of a suite of initiatives which the LME will undertake in 2015 to enhance usage of the contracts.

Remaining items

J/K. Assess powers to limit rents in queues as a future policy option and assess structural solutions to high charges

38. A number of market participants have requested that the LME assess the possibility of (i) capping or banning rents in queues, and (ii) capping the daily level of rent and the level of FoT. The LME committed to discussing this with the market as a result of its 2013 consultation, but was restricted from communicating with the market until the conclusion of the judicial review proceedings. To avoid having too many market consultation and discussion exercises running in parallel, the LME has also waited until the warehouse agreement and logistical review consultations were complete.

39. The LME is therefore today (in Notice 15/072 : A071 : W025) releasing a discussion paper, which contains the LME's views on Queue Based Rent Capping ("QBRC") and Charge Capping ("CC"), including the LME's analysis in respect of potential competition law concerns.

40. Since 2013, a number of other potential "structural" solutions to the issue of queues have been proposed to the LME. In the interests of transparency, the LME has included other items in the discussion paper. The proposals are divided into three categories, namely (i) proposals which would reduce existing queues and/or the impact of existing queues, (ii) proposals which would disincentivise the growth of future queues, and (iii) proposals which would cap charges.

41. All of the proposals in the discussion paper have both positives and negatives for the LME and its market. In particular, certain of the proposals could be legally challenged by a market participant, regardless of the merits of such action, with the intention of delaying or avoiding the introduction of such a measure, and this could create material market uncertainty over a significant period, with consequent difficulties for users of the LME's market. For this reason, the LME is initiating a comprehensive discussion with the market to understand whether the benefits of the various proposals outweigh their disadvantages. Following the discussion process, the LME will consult further as appropriate.

L. Premium contracts

42. Following extensive market engagement, the LME has fully specified both the premium contract structure, and the LME warehousing rules supporting such contracts. These were made public in Notice 14/318 : A310 : W148, and the warehousing rule changes have today been confirmed by the LME.

43. As with any contract, it is important that the behaviour of the regional aluminium premiums is orderly and well-understood by the market. As previously stated, the LME views the discount of the LME price to the "all-in" price of aluminium (observed by the market as the "premium") as being driven by a combination of warehouse queues and non-queue-based factors (primarily regional supply and demand dynamics). The LME believes that both of these items are well-understood by the market – and, in particular, that the expected development of queues (and hence their impact on the observed premium) under LILO (including the effect of the proposed increase in decay factor) can be modelled and understood by those choosing to trade premiums via the new contracts.

44. However, the LME notes that certain of the approaches laid out in the discussion paper could, if implemented, have the effect of materially altering the structure of aluminium pricing. For example, if the LME did pursue an approach of capping or banning rents in queues, this could be expected to reduce the discount at which the LME price traded relative to the "all-in" price,

and hence cause an increase in the LME price coupled with a corresponding fall in premium. In relation to the premium, such a fall could be proportionately very significant.

45. Accordingly, the LME does not believe it is appropriate to launch its premium hedging contracts before it has been able to provide clarity to the market as to its intentions in respect of the items in the discussion paper. To launch the contracts prior to this point would raise the possibility that, were the LME to announce the adoption of one or more measures in the discussion paper, forward premium expectations would change materially, resulting in significant price volatility for the premium contracts. The LME believes this would be inconsistent with its regulatory responsibilities to maintain an orderly market. Furthermore, it would be extremely difficult to appropriately model risk and margin the contracts while potential for a material event of this nature existed.

46. Accordingly, the LME has decided to wait to launch its premium hedging contracts until the outcome of the discussion paper process can be communicated to the market. As set out more fully in the discussion paper itself, this will require time for responses to the discussion paper, and then a potential formal consultation period on any initiatives which the LME proposes to adopt. Accordingly, the LME has set a target launch date of 26 October 2015[8].

47. The LME acknowledges the very significant market interest in premium contracts, and regrets that the products cannot be launched sooner in order to react to this demand. However, the delay to the warehouse reform process caused by the judicial review proceedings has necessarily had the effect of delaying the release of the discussion paper, with a consequent delay to the LME's ability to launch the premium contracts.

48. By today announcing a proposed launch date, the LME is now able to provide clarity to members and users, and will liaise with all interested market participants in respect of the contract, technical connectivity, proposed market-making programmes and volume trader discounts. Any market participant wishing further information is invited to contact Oscar Wehtje (oscar.wehtje@lme.com / +44 20 7264 1749).

Matthew Chamberlain
Head of Business Development

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

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[8] This date remains subject to required regulatory approval for both LME and LME Clear.