To: All members

Ref: 20/069

Classification: General updates Trading

Date: 19 March 2020

UPDATED BUSINESS CONTINUITY PLANS FOR LME BASE METAL FUTURES, ALUMINIUM PREMIUM CONTRACTS AND CASH-SETTLED FUTURES

Summary

1. This Notice restates and updates the Policy for establishing:

   (a) the Official and Closing Prices on LMEselect in the event the Ring is not available or disrupted; and

   (b) the Cash-Settled Future Daily Settlement Price for a number of Cash-Settled Futures in the event that trading is disrupted on LMEselect during the relevant VWAP window, (the “Policy”).

2. This Notice supersedes and replaces LME Notice 19/396, dated 05 December 2019, and appends an updated version of the Policy, which has been revised to include further detail on use by the Quotations Committee of expert judgement in the determination of Official Prices and Closing Prices for forward months.

Defined Terms

3. Terms not otherwise defined in this Notice shall have the meaning ascribed to them in the Rules and Regulation of the LME (“Rulebook”).

Background

4. The Policy was originally put in place to ensure that the LME was able to determine the Official and Closing Prices for base Metal Futures, Aluminium Premium Contracts and the Cash-Settled Future Daily Settlement Prices in the event the Ring was unavailable, or trading, either in the Ring or on LMEselect, was disrupted. The Policy has now been updated to include further detail on the use of expert judgement in the determination of Official Prices and Closing Prices for forward months.
5. The updates to this Notice are a result of detailed further analysis by the LME in the light of the COVID-19 situation, and includes invaluable input from Members. The LME is grateful for the support and cooperation of its Members and the wider market throughout this process.

6. The updated procedures will support the LME’s anticipated temporary move to electronic pricing, as of Monday 23 March 2020.

7. Market users are reminded that, during this period of electronic pricing, there may be consequent changes to market practices (particularly in respect of the guaranteeing of Closing Prices).

Changes

8. The Policy is as amended and restated in Appendix 1 of this Notice. The appended version of the Policy replaces any and all previous versions of the Policy.

General

9. If Members or other interested parties have any questions or requests for further clarification regarding the Policy, please contact Trading Operations at Tradingoperations@lme.com.

Peter Childs
Head of Trading Operations

cc: Board directors
    Ring Dealers Committee
APPENDIX 1

POLICY FOR ESTABLISHING (A) OFFICIAL AND CLOSING PRICES ON LMESELECT IN THE EVENT THAT THE RING IS NOT AVAILABLE OR TRADING IS DISRUPTED AND (B) CASH-SETTLED FUTURE DAILY SETTLEMENT PRICE FOR CASH-SETTLED FUTURES IN THE EVENT THAT TRADING ON LMESELECT IS DISRUPTED DURING THE RELEVANT VWAP WINDOW

Defined Terms

1. Capitalised terms not otherwise defined herein shall have the meaning ascribed to them in the Rules and Regulations of the LME (the “Rules”).

Policy

2. To ensure continuity in the publication of the LME’s prices in the event that the Ring is not available or trading is disrupted by an emergency:

   (a) the Official and Closing Prices will be established by the Quotations Committee basis LMEselect activity, in accordance with the provisions set out in Paragraphs 3 to 14 (inclusive); and

   (b) the Cash-Settled Future Daily Settlement Price for Cash-Settled Futures shall be determined in accordance with the provisions in Paragraph 18.

Establishment of Official and Closing Prices

3. In the event that the Ring is not available, or Ring activity is disrupted by an emergency situation, the Official Prices and Closing Prices for each base Metal Future and each Aluminium Premium Contract will still be established at the prescribed times. Where this is not possible, or if Ring trading is disrupted while the Ring is in operation, the Exchange will communicate the revised times for determining the Official Price and/or Closing Prices for any relevant Metal Future or Aluminium Premium Contract as soon as is practically possible. Any Official Price or Closing Price established in the Ring before the Exchange’s business continuity procedures (“BCP”) are invoked may stand, subject to the discretion of the Quotations Committee.

Arrangements for key Prompt Dates

4. The following Official Prices and Closing Prices will be determined using a volume weighted average price (“VWAP”) from transactions on LMEselect over a 5 minute pricing period (the “Pricing Period”), where the minimum volume requirement threshold (“MVR Threshold”) is met:
i) **Cash and 3 months for Metal Futures**; and

ii) **Month 1 for Aluminium Premium Contracts.**

The VWAPs will then be rounded up or down, as applicable, to the closest USD $1 for Nickel and Tin, and to the closest USD $0.50 for all other Metal Futures and for Aluminium Premiums. For information on the determination of all other Prompt Dates (for which Official Prices and Closing Prices are published) please refer to Paragraphs 9 to 14.

5. For the Official Prices referred to in Paragraph 4, the Pricing Period will be the time that would have constituted the 5 minutes of the second Ring of the first session for the relevant metal as set out on the LME’s website from time to time. For the Closing Prices referred to in Paragraph 4, the Pricing Period will be the time that would have constituted the last 5 minutes of the kerb in the second session for the relevant metal as set out on the LME’s website from time to time.

6. The MVR Thresholds are set out in Annex 1. All LMEselect trades in outrights for the relevant Prompt Date for the relevant Metal Future or Aluminium Premium Contract that occur during the relevant Pricing Period will be considered for the purposes of the MVR Threshold, unless the Exchange excludes any trade it deems erroneous at the Exchange’s absolute discretion. Unless the relevant MVR Threshold is not reached, any LMEselect trade which is not excluded by the Exchange shall be included in the VWAP calculation.

7. The Official and Closing Prices determined under this Policy for each metal will only be one price and not a two-way bid/offer price (as would typically be the case). However, this single price will be disseminated on the LME market data feed as both the bid and the offer price – and, for the purposes of usage of the data (in physical supply contracts or otherwise), the LME considers that the single price may be utilised as both the bid and offer price.

8. If the relevant MVR Threshold is not reached, the Quotations Committee shall determine the Official Price and Closing Price for the affected Prompt Date using the following pricing waterfall:

   a) it shall be the last traded price on LMEselect during the Pricing Period if the last traded price is within the bid/offer on the close of the relevant Pricing Period;

   b) if the last traded price on LMEselect during the Pricing Period is outside of the bid/offer on the close of the Pricing Period, then the closest price to the last trade that falls within the bid/offer will be used;

   c) if the relevant Metal Future or Aluminium Premium Contract is untraded on LMEselect during the Pricing Period, then the mid-point of the bid/offer on the
close of the Pricing Period will be used. Where this is not appropriate, then the Official Price and Closing Price will be determined by the LME in its absolute discretion using expert judgement. Expert judgement would typically involve observing the last trade/valuation prior to the Pricing Period and/or refinement of the curve for the forward months;

d) if the relevant Metal Future or Aluminium Premium Contract is untraded on LMEselect during the Pricing Period and there is no bid and/or offer available on the close of the Pricing Period, then the Quotations Committee may, in its absolute discretion, reference the last traded price on LMEselect prior to the commencement of the Pricing Period;

e) if the relevant Metal Future or Aluminium Premium Contract is untraded on LMEselect during the Pricing Period and there have been no concluded trades made on LMEselect prior to the commencement of the Pricing Period, then the Quotations Committee may, at its absolute discretion, discover the price as close as possible to the previous day’s Official or Closing Price, taking into account such other information as it shall in its absolute discretion see fit.

Where:

a) the LME does not have access to sufficient input data necessary to determine the Official Price and Closing Price; or

b) a linear approach to the pricing waterfall would result in an inaccurate price (in the Quotation Committee’s expert judgement),

the LME may set the Official Prices and Closing Prices at a price at its absolute discretion, using expert judgement which includes referencing data sources and available spread trading information, including but not limited to inter-office activity and prevailing market prices. In these circumstances, the considerations in Paragraphs 10 to 14 would apply.

**Arrangements relating to forward months**

9. The establishment of all forward months (i.e. all outright Prompt Dates, excluding Cash and 3 Months (for Metal Futures) and Month 1 (for Aluminium Premium Contracts)) that are published as part of the Official Prices and Closing Prices will not utilise VWAPs. Rather, they will typically be determined on the basis of the pricing waterfall set out in Paragraph 8, but will also take into account any available spread trading information in the event that there is a lack of liquidity in relation to outright trades. As set out in Paragraph 8, the Quotations Committee may use expert judgement in the determination of Official Prices and Closing Prices for the Prompt Dates addressed by this Paragraph 9. In these circumstances, the considerations in Paragraphs 10 to 14 would apply.
**Expert judgement**

10. In these circumstances, the most active months will form the basis for the forward prices. For the purposes of the determination of the forward months for the Official Prices and Closing Prices, the Quotations Committee will give regard to all spread trading activity that has occurred throughout the day in that metal. However, it will give particular regard to trading activity and orders placed towards and on the close, particularly where significant volumes have traded and/or where there is established order depth, in the Quotation Committee’s view, to represent a fair reflection of prevailing market prices.

11. Spread orders placed, and transactions concluded, up to the close of each respective VWAP Pricing Period for outrights (i.e. Cash and 3 Months), will be taken into account for the purpose of determining the forward months for the Official Prices and Closing Prices. Spread trading activity (including orders and concluded transactions) will only be taken into account for the determination of these forward month prices where it occurs on or before the end of the VWAP Pricing Period for outrights (see Paragraph 5 above).

12. Where traded or quoted prices do not equate with each other across the forward months, the Quotations Committee shall use expert judgement to adjust the price curve. Such adjustments will be made having taken into account all relevant trading activity, trading volumes, order depth (order volume) and the length of time orders have been sitting on the central limit order book.

13. Any trades and/or orders that are deemed to be out of line with prevailing market prices for the forward months will be disregarded by the Quotations Committee at its absolute discretion.

14. For the purposes of determining the forward months for the Closing Prices, the Quotations Committee may validate order and trading activity in LMEselect against other data sources and available spread trading information, including but not limited to inter-office activity and prevailing market prices.

**Publication of Official Prices**

15. When the Official Prices have been established for each Metal Future and each Aluminium Premium Contract, provisional prices will be published to LMEselect users via an LMEselect market message as soon as is practically possible after the close of the relevant Pricing Period for that metal (with 5 minutes being the target). LMEselect Member users will then have 5 minutes to raise objections to the provisional prices. If no objections are lodged with the LME after 5 minutes, the status of these prices will become final. If there is an objection lodged with the Quotations Committee, the objection will be reviewed with the resolution
published to LMEselect users via an LMEselect market message. Any objections should be sent to the Quotations Committee at Closing.Prices@lme.com.

16. Official Prices will be made available to LME licenced data vendors both in their provisional and final status.

Publication of Closing Prices

17. When the Closing Prices have been established for each Metal Future and each Aluminium Premium Contract, provisional prices will be placed on the LME SFTP server for Category 1, Category 2 and Category 4 Members to view. At the same time, the Closing Prices will be disseminated to LME licenced data vendors with an appropriate message to show the status of these prices as provisional. The timing for the publication of provisional prices will be determined by the Quotations Committee, as soon as is practical after each metal closes out on LMEselect from 4.00 pm (or at a revised time communicated by the Exchange). The objection procedure will then apply until 5.30 pm. If no objections are lodged by 5.30 pm, the provisional prices will be the Closing Prices. If there is an objection lodged with the Quotations Committee, this will be reviewed with the resolution published to Members and LME licenced data vendors in the usual way. Any objections should be sent to the Quotations Committee at Closing.Prices@lme.com.

Establishment of Cash-Settled Future Daily Settlement Price for Cash-Settled Futures

18. In the event that trading is disrupted on LMEselect during the relevant VWAP window for a Cash-Settled Future, the Cash-Settled Future Daily Settlement Price shall continue to be determined using the current waterfall pricing methodology, except that a different pricing period shall be used to determine the Cash-Settled Future Daily Settlement Price and the timing of the publication of these prices will be determined by the Quotations Committee at a revised time communicated by the Exchange.

General

19. For reference, Annex 2 shows the relevant Pricing Period for each metal during Ring 2 and the kerb in the second session.
Annex 1 – MVR Threshold for VWAP

<table>
<thead>
<tr>
<th>Contract</th>
<th>Cash MVR Threshold</th>
<th>3 Month MVR Threshold</th>
<th>Month 1</th>
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</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>Cu</td>
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<td>100</td>
<td></td>
</tr>
<tr>
<td>Aa/Na</td>
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<td>20</td>
<td></td>
</tr>
<tr>
<td>Sn</td>
<td>10</td>
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<tr>
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</tr>
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</tr>
<tr>
<td>Ni</td>
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<tr>
<td>An/Aw/Ae/As</td>
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Annex 2 – VWAP pricing period for outrights for each contract during Ring 2 and Kerb

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<tr>
<td>Cu</td>
<td>12:30:00:000 - 12:34:59:999</td>
</tr>
<tr>
<td>Aa/Na</td>
<td>12:35:00:000 - 12:39:59:999</td>
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<tr>
<td>Sn</td>
<td>12:40:00:000 - 12:44:59:999</td>
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<td>Pb</td>
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<tr>
<td>Zn</td>
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<tr>
<td>Al</td>
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</tr>
<tr>
<td>Ni</td>
<td>13:00:00:000 - 13:04:59:999</td>
</tr>
<tr>
<td>An/Aw/Ae/As</td>
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</table>

<table>
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<th>Contract</th>
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</tr>
<tr>
<td>Co</td>
<td>16:20:00:000 - 16:24:59:999</td>
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<tr>
<td>Ah</td>
<td>16:30:00:000 - 16:34:59:999</td>
</tr>
<tr>
<td>Aa/Na/Aw/Ae/As</td>
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<tr>
<td>Cu</td>
<td>16:45:00:000 - 16:49:59:999</td>
</tr>
<tr>
<td>Ni</td>
<td>16:55:00:000 - 16:59:59:999</td>
</tr>
</tbody>
</table>

For the avoidance of doubt, only spread orders and transactions concluded up to the close of each respective VWAP Pricing Period will be taken into account for the purposes of determining the forward months for the Official Price and Closing Prices.

Metal Codes: Cu – Copper, Al – Primary Aluminium, Zn – Zinc, Ni - Nickel, Pb – Lead, Sn – Tin, Aa – Aluminium Alloy, Na – NASAAC, Co – Cobalt,

An – Aluminium Premium Future North America, Aw – Aluminium Premium Future Western Europe, Ae – Aluminium Premium Future East Asia, As – Aluminium Premium Future South East Asia