

LMEbullion – User Guide

Participants

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1 Document Overview

1.1 Purpose

This document provides guidance on how to use LMEbullion, explains the process and the screens Participants see when using the system.

1.2 Scope

This document contains the information Participants need to use LMEbullion and is divided into 6 sections:

- Introduction (Section 2)
- Process Overview (Section 3)
- LMEbullion Auction Site (Section 4)
- Client Administration (Section 5)
- User Types Explained (Section 6)

1.3 Intended Audience

This document is written for Participants and Clients that have access to LMEbullion and intend to participate in the price discovery for Platinum and Palladium.

1.4 Contact Information

For any further questions, please contact Trading Operations for additional information.

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2 Introduction

LMEbullion is our custom-built electronic auction system for platinum and palladium. Designed in close consultation with the precious metals community, LMEbullion is a 'best of both worlds' solution combining the best elements of an electronic platform with Platinum Group Metals (PGM) fixing methodologies.

Launched in December 2014, LMEbullion delivers fully automated price-display auctions enabling twice-daily price discovery and price dissemination via LME-licensed data distributors.

LMEbullion's system operating hours are between 08:00 - 18:00 (UK Time).

The auctions begin each day at 09:45 and 14:00, both starting with Platinum and shortly followed by Palladium.

LMEbullion is a browser based system available to Participants and their Clients.

There are two URL web addresses in which LMEbullion is accessible.

2.1 LMEbullion – Auction Site

https://pgm.lmebullion.com

This site permits Market Participants and Clients access to the auction in order to participate in the price discovery for Platinum and Palladium.

Additionally, observers will be able to track the auction in 'view only' mode, when in progress.

All LMEbullion user types are explained in Section 6.

2.2 LMEbullion – Auction Commentary Site

https://www.lmebullion.com/auction

This site is only available to licensed LME Market Data Vendors and paying Members who publish the auction commentary on their applications or have a vested interest. The site contains round by round commentary, detailing when a price has been rejected / confirmed for each metal and each rounds imbalance.

3 Process Overview

The process flow below (Figure 1) provides a description of how the LME bullion auction operates within a given business day.





Figure 1 – Process flow

The auction process is designed to allow Participants and Clients to submit interest against a set price. Once all in the Quorum have submitted interest, the round will be reviewed. If the imbalance of interest is over the configured tolerance, all interest will be cleared, a new price will be calculated and the auction will enter a second round. If the imbalance of interest is within the configured tolerance, the price will be set and the auction will be completed.

4 LMEbullion Auction Site

4.1 LMEbullion – Auction Users

This section shows how to get started using the auction, or to track an auction's progress. Figure 2 below displays the login screen for those users who will be taking part in an auction (address: <u>https://pgm.lmebullion.com</u>).

LMEbullion: User Login	
 LMEbullion - Portal Access Licence The London Metal Exchange (the "LME") has developed LMEbullion for the entering of orders by Users, during a Pricing Discovery Event, to discover the London Platinum Price and London Palladium Price in accordance with the LPP Prices Regulations. Access to the LMEbullion online platform, as updated and modified from time to time ("LMEbullion") is granted to you, the User, in accordance with the terms set out in the London Platinum Price and London Palladium Price Regulations ("LPP 	•
Log In	
O LONDON METAL EXCHANG	E

Figure 2 – LMEbullion Auction Login screen

The login screen is the User's entry point to access the LMEbullion auction screen. It will be the first screen visible when accessing the site.

Figure 3 below displays the Auction screen (with an annotated explanation) that users will access after a successful login. Once the auction is in progress, Participants and Clients are able to interact with the auction screen and view auction information.



Figure 3 – Auction screen with key features explained



4.2 Submitting Interest

Participants and Clients are able to submit interest during an auction by selecting either the 'Buy', 'Sell' or 'No Interest' tab. In addition there is also an option to view the 'Net Interest' or 'Aggregated Interest' (shown in Figure 4).

		User - House a	nd Client Trader	Log Off
	Enter	Interest		
View	Net	V	iew Aggregated	
			Troy C	Dunces
Buy	No	nterest	Sell	
[Subm	it Interest		

Figure 4 – Auction Page (Interest Section)

Participants and Clients are able to submit interest by entering the amount (in Troy ounces). Once the amount has been entered, the Participant / Client will need to click the 'Submit Interest' button (at the bottom of Figure 5).

	View Net	View Aggr	egated	
Clear All	Buy :	7,000	Exclu	de All
Reference	Troy Ounces	Buy/Sell	Inclu	Ided
lientA	3000	Buy	Yes	No
lientB	4000	Buy	Yes	No
		Buy	Yes	No
		Buy	Yes	No
		Buy	Yes	No
		Buy	Yes	No
ther		Buy	Yes	No

Participants with 'House and Client Trader' access are able to submit client interest by entering the client's reference number (to the left of Figure 5) and the requested amount (in Troy ounces). In addition, Client interest can be excluded (shown to the right of Figure 5).

Providing the interest has not been excluded, the total amount (in Troy ounces) will affect the total imbalance whilst the auction is in progress

A record of the User's submitted interest is displayed within a section titled: 'My Submitted Interest' (Figure 6).



	surrent Rou	nd Details		ly submitted i	nterest
Total Buy	÷	Troy Ounces	Buy	12,000	Troy Ounces
Fotal Sell		Troy Ounces			
Total Imbalance		Troy Ounces			

Figure 6 – Submitted interest during auction

4.3 Maintaining Aggregate Interest

Participants and Clients may clear the submitted interest, if it is no longer required. This is done by selecting the 'Clear All' tab within the 'Interest section' of the auction screen (shown in Figure 7).

In addition individual orders can be removed by deleting the reference number and amount.

	View Net	View Aggr	egated	
Clear All	No Int	erest	Exclu	de All
Reference	Troy Ounces	Buy/Sell	Inclu	lded
	4	Buy	Yes	No
		Buy	Yes	No
		Sell	Yes	No
		Buy	Yes	No
		Buy	Yes	No
		Buy	Yes	No
her		Buy	Yes	No

Figure 7 – Interest Section (Live Auction)

4.4 Grace Period

A Grace period is a five second period prior to the assessment of the auction. This occurs once all Traders have expressed interest and no flags have been set. A Grace period is indicated by a change of colour to the initial price to amber (see Figure 8, showing the initial price in amber).

During this period, if new interest is submitted, or a flag is raised, the Grace period will restart. After the Grace period, the auction will be assessed by the Benchmark Pricing Function.



	LMEbulli	ion Auction		L	LME House	e And Circrit Trader
Auction Status	Auction Type				Enter Interest	
Auction In Progress Round 1	Platinum Afternoon Auctic	House a	and Client	View Net	U. I	View Apprepated
		User History	Fam Halory	12000		Troy Ounces
				Buy	No Interest	Sell
	Proposed Price (Grace	e Period)			Submit Interest	
11140	31.123.	00	Den Denne			
Current Rour	Initial Price	My Submitted	Interest			
Current Rour	Initial Price nd Details Troy Ounces	My Submitted Buy 12,000	Interest Troy Ounces			
Current Rour fotal Sell -	Initial Price ad Details Troy Ounces Troy Ounces	My Submitted Buy 12,000	Interest Troy Ounces			
Current Rour otal Buy - otal Sell - otal Imbalance -	Initial Price Ind Details Troy Ounces Troy Ounces Troy Ounces	My Submitted Buy 12,000	Interest Troy Ounces			

Figure 8 – Auction screen (Grace Period)

4.5 Flagging Mechanism

'House and Client Traders' may use the 'Flagging' functionality to prevent an auction from completing while they review their positions (not for Direct Clients). This is done by selecting the 'Flag' Tab which can be used at any time during the auction (shown in Figure 9).



Figure 9 – Flag (Live Auction)

Once selected, the proposed auction price is displayed in red and will not be set (shown in Figure 10). A period of 30 seconds will be provided to the House / Client Trader in order to adjust their position.



Figure 10 – Flag up (Live Auction)

Once the interest is adjusted, the flag raised will clear automatically. In addition, Users should clear the flag they have raised themselves if it is no longer required. After the 30 second period, the flag will be cleared and the auction will continue.

In the event of a 'Grace Period' a House / Client Trader will be able to 'Flag Up' during this time (shown in Figure 11). The House / Client Trader will be allocated 30 seconds to adjust their positions.





Once the flag has been cleared, the Grace Period will continue and providing that all flags are down, the specific round will end and be assessed.

Once all participants have entered their interest and the imbalance is within the configured threshold, the price will be confirmed. A confirmed price is indicated by a change of colour to the initial price to green (see Figure 12). The total buy, sell and imbalance will also be displayed.

Auction S	Status	Auction Type							Enter Interest			
Auction Co Round	emplete	Platinum Afternoon Auctio		Ho	ouse and Clien			View Net		Ver A	ggregated	1
				User Hi	aby Pim H	story	12000				Troy Ouno	18
		Drize Confirmer						Buy	No interest		Sell]
		Price Comme							Submit Interest			
Time 14:21 GBI	P 704.36 R 896.99	61,125.0	00		Flag Dow	n						
Time GBI 14:21 EUF	P 704.36 R 898.99 Current Round De	51,125.0 Initial Price	00	My Submi	Flag Dow	n						
Time 14:21 GBI EUF	P 704.36 R 898.99 Current Round De 12,000	tails Troy Ounces	00	My Submi	Flag Dow	•						
Time 14:21 GBI EUF Total Buy Total Sell	P 704.36 R 898.99 Current Round De 12,000 15,000	tails Troy Ounces Troy Ounces	00	My Submi	Flag Dow	n						

Figure 12 – Confirmed Price

4.6 Logging Out

A User will be able to log off the auction site by selecting the 'Log Off' tab at the top, right corner of the auction screen. Once a User has logged out, their session within the auction will be disconnected (shown in Figure 13).

User - House and Client Trader	Log Off
Enter Interest	

Figure 13 – 'Log Off' Tab

5 Client Administration

The Client Administration screen (Figure 14) is available to 'Client Administrator' Users only. This access provides the functionality of adjusting Client credit limits, if required.

	Clien	t Administrator	
Trader Summary House Only Trader: \$3,150,000.00 (3000 T Client Only Trader: \$4,200,000.00 (4000 T	Troy Ounces) roy Ounces)		
Client Summary			
Client Name	Client Current Position	Client Current Credit Limit	
Client P	No Recorded Interest	\$ 10,000,000.00 (9,523.81 Troy Ounces)	\$ 0
Client Q	No Recorded Interest	\$ 20,000,000.00 (19,047.62 Troy Ounces)	s 14000000
Client R	\$5,250,000.00 (5,000.00 Troy Ounces)	\$ 15,000,000.00 (14,285.71 Troy Ounces)	\$ 0
Client S	No Recorded Interest	\$ 30,000,000.00 (28,571.43 Troy Ounces)	\$ 0
Client T	No Recorded Interest	\$ 15,000,000.00 (14,285.71 Troy Ounces)	\$ 0
	Submit	Changes	

Figure 14 – Client Administration screen

A record of all current Client positions is displayed within the Client Administration screen. (Shown in Figure 15)

Client Summary	
Client Name	Client Current Position
Client P	No Recorded Interest
Client Q	No Recorded Interest
Client R	\$5,250,000.00 (5,000.00 Troy Ounces)
Client S	No Recorded Interest
Client T	No Recorded Interest

Figure 15 – Client Summary Section (Client Administrator screen)



A Client Administrator is able to adjust a Client's credit limit by entering the amended amount of credit (in USD) and then selecting the 'Submit Changes' tab (shown in Figure 16)

\$ 10,000,000.00 (9,523.81 Troy Ounces)	\$	0
\$ 20,000,000.00 (19,047.62 Troy Ounces)	s	1400000
\$ 15,000,000.00 (14,285.71 Troy Ounces)	s	0
\$ 30,000,000.00 (28,571.43 Troy Ounces)	s	0
\$ 15,000,000.00 (14,285.71 Troy Ounces)	\$	0

<u>Figure 16 – Client Credit Limit Adjustments</u>

Updated credit limits are immediately active and applied to the direct client's next submission. In addition, any submitted interest made under the previous limit will stand, even if the limit has been reduced to a level lower than the previous order, as submissions are firm and are valid when entered.

Once submitted, the Client Administrator screen will refresh and the amended credit limit will be displayed as shown in Figure 17.

Client Current Credit Limit



Figure 17 – Client Credit Limit Adjustments

6 User Types Explained

6.1 Level of Access

Below are the defined levels of access to LMEbullion:

- House and Client Trader
- House Only Trader
- Client Only Trader
- Observer
- Direct Client
- Direct Client with Flag
- Administrator

6.2 Access Functionality

A description for each level of access:

6.2.1 House and Client Trader

- Functionality

The Participant has access to the auction screen, with full functionality.

- Purpose

This role supports the submission of house and client interest, for a Participant intending to operate on behalf of the house and their clients.

- Restrictions

This role is unable to view the Client Administration screen.

6.2.2 House Only Trader

- Functionality

The Participant has access to the auction screen, with full functionality. This role supports the submission of house interest only.

- Purpose

This role supports the submission of house interest, for a Participant intending to operate on behalf of the house.



- Restrictions

This role is unable to submit interest on behalf of clients and is unable to view the Client Administration screen.

6.2.3 Client Only Trader

- Functionality

The Participant has access to the auction screen, with full functionality. This role supports the submission of client interest only.

- Purpose

This role supports the submission of client interest, for a Participant intending to operate on behalf of their clients.

- Restrictions

This role is unable to submit interest on behalf of a house and is unable to view the Client Administration screen.

6.2.4 Observer

- Functionality

This role is able to view the auction when in progress.

- Purpose

Designed for auditors and permitted stakeholders who have an interest in the auction.

- Restrictions

This role is unable to enter interest, orders or flag up during the auction.

6.2.5 Direct Client

- Functionality

This role is able to view the auction when in progress and submit orders as a direct client.

- Purpose

This role supports the direct submission of interest by a Participant's Client, rather than via a Participant's Client Trader.



- Restrictions

This role is unable to flag up during the auction and is unable to view the Client Administration screen.

6.2.6 Direct Client with Flag

- Functionality

This role is able to view the auction when in progress and submit orders as a direct client.

- Purpose

This role supports the direct submission of interest by a Participant's Client, rather than via a Participant's Client Trader.

- Restrictions

This role is unable to view the Client Administration screen.

6.2.7 Administrator

- Functionality

This role is entitled to access the Client Administration screen.

- Purpose

This role is designed for Client Administration Users, to monitor exposure from in-house and direct client traders, as well as managing direct client lines of credit.

- Restrictions

This role is unable to access the auction screen.

6.3 Alternative Process

This information is also contained in the LPP Prices Regulation, 'Part B: Alternative process'.

This policy applies to the activities of LME in operating the LPP Prices Discovery Process. The objective of this policy is to set out LME's policies and procedures in the event that the Pricing Discovery Event is delayed or that the prices can no longer be discovered or published on a temporary or permanent basis.

6.3.1 Contingency Measures

- If the Chair of the Pricing Discovery Event is unable to attend, an alternate shall be selected from the Benchmark Pricing Function.
- In the event that the minimum quorum requirement has not been met at the start of any Pricing Discovery Event for any reason other than a system outage (in which case the procedure set out below shall be followed), the Benchmark Pricing Function shall use its expert judgement to determine the LPP Prices with reference to the most recent previously established price, adjusted for known recent or related transactions, known market events, and any other available data, information or known factors reasonably deemed relevant by the Benchmark Pricing Function in its expert judgment.
- If a system outage results in Participants being unable to login to LMEbullion and subsequently the required quorum is not met, the Chair may promptly initiate the Pricing Discovery Event through a secure Process telephone call with the Participants gaining access through their pre-agreed secure dial in codes. Participants shall submit orders verbally with the Chair confirming each submission. The Chair shall determine the individual LPP Price for platinum and palladium through separate Auctions, calculating the net imbalance of buys and/or sells and adjusting the price accordingly in line with standard procedure.
- In the event that a Pricing Discovery Event cannot be conducted and the LPP Price cannot otherwise be determined, a "no-fix" shall be declared.
- LME will use best endeavours to publish the LPP Prices in accordance where such means of publication are available and otherwise on the internet, by email or any other communication LME may determine reasonable in the circumstances.