

BENCHMARK STATEMENT - LBMA GOLD PRICE AND THE LBMA SILVER PRICE

1. Introduction

ICE Benchmark Administration Limited (IBA) is the Benchmark Administrator of four systemically important benchmarks:

- ICE LIBOR – the world's most widely used benchmark for short term bank borrowing rates
- ICE Swap Rate – the global interest rate swap benchmark for swap rates and spreads
- LBMA Gold Price – the principal global benchmark for daily spot gold prices, and
- LBMA Silver Price – the principal global benchmark for daily spot silver prices.

This Benchmark Statement is published by IBA in compliance with Article 27 of the European Benchmarks Regulation (BMR).

The BMR regulates the provision of, contribution to and use of benchmarks. Recital (6) of the BMR sets out its overarching purpose:

“[...] in order to ensure the proper functioning of the internal market and improve the conditions of its functioning, in particular with regard to financial markets, and to ensure a high level of consumer and investor protection, it is appropriate to lay down a regulatory framework for benchmarks at Union level.”

This Benchmark Statement is for the LBMA Gold and Silver Prices which are Commodity benchmarks under the BMR. Accordingly the specific Commodity benchmarks requirements in Annex II apply instead of the general BMR requirements of Title II (with the exception of Article 10 concerning outsourcing).

2. About the LBMA Gold Price and the LBMA Silver Price

The LBMA Gold and Silver Prices are the global benchmark prices for unallocated gold and silver delivered in London.

Producers, the investment community, banks and central banks, fabricators, jewellers and other consumers as well as market participants from around the globe and use the benchmarks as reference prices.

The ability to transact and reference a single transparent price, produced by a regulated benchmark administrator provides significant benefits to the market. The LBMA Gold and Silver Prices are homogeneous products governed by LBMA definitions. The benchmarks facilitate spot, monthly averaging, cash-settlement, location swaps, fixed for floating swaps, options and other derivative transactions important to price risk management.

IBA became the administrator of the LBMA Gold Price in March 2015 with the express intention of evolving the methodology to be a physically settled, electronic, tradeable Auction process to replace the former Gold Fixing Price which had been in existence since September 1919.

IBA became the administrator of the LBMA Silver Price in October 2017 to implement essentially the same processes and principles as for the LBMA Gold Price including the changes that IBA had made for the LBMA Gold Price, including removal of the previous Seller's Premium and the introduction of central clearing.

IBA keeps benchmark methodologies under continuous review and has appointed the Precious Metals Oversight Committee with responsibilities which include reviewing at least annually the definition and methodology of the LBMA Gold and Silver Prices. Section 7 below provides more information about the Committee.

3. Definitions of key terms relating to the benchmarks

The meaning of terms used in the Benchmark Statement are as follows:

Term	Meaning
Auction	A process operated by IBA by which buyers and sellers of loco London spot gold or silver (as the case may be) express an interest for the purpose of entering into transactions on UK bullion business days
Auction Start Time	The scheduled start time of each Auction, as specified in the relevant IBA Auction Specification document from time to time
Code of Conduct	The most recent version of the Code of Conduct for the IBA Precious Metals Auctions and the LBMA Gold and Silver Price Benchmarks, as amended from time to time and published on the IBA website
Final Price	USD per Ounce of loco London Gold or loco London Silver, as the case may be. The Final Price is the Price during the final Round of the Auction
Imbalance	The difference, expressed in Ounces, between the buying and selling interest at the completion of a Round
LBMA	The London Bullion Market Association
Spot unallocated Loco London Silver	The internationally accepted standard for silver trading and settlement. Settlement and delivery is 2 business days after the trade
Spot unallocated Loco London Gold	The internationally accepted standard for gold trading and settlement. Settlement and delivery is 2 business days after the trade
Opening Price	The value in USD/oz at the first Round of the relevant IBA Auction

Order	Buying or selling interest expressed in Ounces in the IBA Gold Auction and in hundreds of thousands of Ounces (00,000s oz) in the IBA Silver Auction
Ounce	One Troy ounce (oz), the traditional unit of weight for precious metals
Participant	<p>A Participant in IBA's gold and/or silver Auction(s), either as a Direct Participant or an Indirect Participant:</p> <ul style="list-style-type: none"> • Direct Participants manage their orders in the Auction via the ICE Trading Platform and their trades at the end of the Auction are against the clearing house or other Direct Participants • Indirect Participants are clients of a Direct Participant. They manage their own orders in the Auction via the ICE Trading Platform and at the end of the Auction they have a bilateral trade with their Direct Participant <p>Criteria for becoming and remaining a Direct or Indirect Participant are published by IBA at:</p> <p>https://www.theice.com/iba/lbma-gold-silver-price</p>
Price	The value of one Troy Ounce of gold or silver in the relevant Auction, expressed in USD
Round	The defined time interval during which Participants can enter or change Orders (at a given Price)
Unallocated	Gold or silver from a general pool rather than a specific bar of gold or silver

4. BMR Annex II methodology requirements

Annex II requires an administrator of a commodity benchmark to formalise, document, and make public any methodology that the administrator uses for a benchmark calculation:

4.1 *Criteria and procedures*

IBA operates electronic Auctions for spot, unallocated loco London gold and silver, providing a market-based platform for buyers and sellers to trade. IBA's Auction process is a facility for trading physical spot gold and silver at prices at which balance can be found between buying and selling interests.

Operating Auctions at specific times serves to bring larger pools of liquidity together which enhances the price discovery process.

The Auctions are run at 10:30 and 15:00 London time for gold and at 12:00 London time for silver.

The Auction process is run on the ICE Trading Platform which provides real-time order management, separation of house and client orders, live credit limit controls, a full audit history, compliance monitoring tools and advanced straight through processing using ICE's APIs for trade capture, order entry and surveillance.

Participants have 30 minutes directly before an Auction starts to queue up their orders. This is known as 'Round zero'.

The Auctions then run in Rounds of 30 seconds. At the start of each Round, IBA publishes a price for that Round. Participants then have 30 seconds in which to enter, change or cancel their orders in the ICE Trading Platform.

The prices during the Auction are determined by an algorithm that takes into account current market conditions and the activity in the Auction. Each Auction is actively supervised by IBA staff.

At the end of each Round, order entry is frozen and the system checks to see if the difference between buying and selling (the imbalance) is within the imbalance threshold (normally 10,000 oz for gold and 500,000 oz for silver).

If the imbalance is outside of the threshold at the end of a Round, then the Auction is not balanced and the price is adjusted and a new Round starts.

If the imbalance is within the threshold then the Auction is finished and the Final Price is set. Any imbalance is shared equally between all Direct Participants (even if they did not place orders or did not log in) and the net volume for each participant trades at the Final Price.

The gold and silver Auctions settle against US Dollars only. The benchmarks in the other currencies are not tradeable directly through the Auction.

The final Auction prices are published to the market as the LBMA Gold Price AM, the LBMA Gold Price PM and the LBMA Silver Price benchmarks, respectively.

The price formation for each Auction is in US Dollars but the Final Price is also referenced in Euros, Pounds Sterling, Australian Dollars, Canadian Dollars, Onshore and Offshore Yuan, Indian Rupees, Japanese Yen, Malaysian Ringgit, Russian Rubles, Singapore Dollars, South African Rand, Swiss Francs, New Taiwan Dollars, Thai Baht and Turkish Lira.

IBA does not employ assessors or exercise expert judgement in operating the Auctions. IBA's algorithm to determine the prices at the start of each Round of an Auction takes into account current market conditions and the activity in the Auction. No assumptions, models or extrapolation from collected data are considered in the determination of the LBMA Gold and Silver Prices.

4.2 Assessors

The BMR refers to an administrator's procedures and practices to ensure consistency between its assessors in exercising their judgement. This is not applicable to the LBMA Gold and Silver Prices since IBA does not employ assessors.

4.3 *Input data*

To ensure that the LBMA Gold and Silver Prices reflect the underlying markets, IBA produces the benchmarks based on the Final Price of each Auction, which is the most liquid window for buying and selling spot, loco London gold and silver respectively each day.

The input data to calculate the LBMA Gold and Silver Prices is therefore the Final Price of the relevant Auction in US Dollars and it is referenced in other currencies using foreign exchange rates existing at the time that the final Round ended.

IBA has procedures in place to document contemporaneously all input data which is relevant for the calculation of the LBMA Gold and Silver Prices. Such records will be retained for at least five years.

4.4 *Minimum data*

IBA publishes Auction Specification documents that specify the relevant parameters for the benchmarks, including:

Parameter	Gold	Silver
Round Duration	30 seconds	30 seconds
Imbalance Threshold	10,000 Troy oz	500,000 Troy oz
Maximum Emergency Imbalance Threshold	4,000 Troy oz per Direct Participant	1,000,000 Troy oz
Minimum number of Participants	3 - see section 5.3	3 - see section 5.3
Maximum Single Order Size	100,000 Troy oz	1,000,000 Troy oz
Minimum Order Size	1 Troy oz	1,000 Troy oz
Minimum Allowable Price Move	USD 0.01	USD 0.001
Decimals of Published Prices	3 for USD 2 for other currencies	3 for USD 2 for other currencies

The Auction Specification for gold is published at:

https://www.theice.com/publicdocs/futures/IBA_Gold_Auction_Specification.pdf

The Auction Specification for silver is published at:

https://www.theice.com/publicdocs/IBA_Silver_Auction_Specification.pdf

4.5 Significant proportion of the total input data

The BMR states that an administrator should specify criteria and procedures that address assessment periods where one or more contributors submit input data that constitute a significant proportion of the total input data for that benchmark.

IBA stipulates a Maximum Single Order Size, which is 100,000 Troy oz for gold and 1,000,000 Troy oz for silver.

5. Other BMR Annex II requirements

The following information is published by IBA in accordance with the requirements of Annex II (Commodity Benchmarks):

5.1 Criteria and procedures used to determine the benchmark

Criterion /procedure	Gold	Silver
Description of the input data and priority given to different types of input data	The input data is the Final Price in USD which is referenced in other currencies using foreign exchange rates prevailing when the Auction ended	The input data is the Final Price in USD which is referenced in other currencies using foreign exchange rates prevailing when the Auction ended
Minimum data needed to determine a benchmark	Three Participants - see section 5.3 below	Three Participants - see section 5.3 below
Models or methods of extrapolation	Not applicable	Not applicable
Any procedure for rebalancing the constituents of a benchmark's index	Not applicable	Not applicable

5.2 Exercise of judgement or discretion

No exercise of judgment or discretion is exercised by IBA in the determination of the LBMA Gold and Silver Prices. The Auctions are operated in accordance with defined rules and operational procedures.

5.3 Procedures in periods of stress or insufficient inputs

The BMR states that an administrator must have procedures which govern the determination of the benchmark in periods of stress or periods where transaction data sources may be insufficient, inaccurate or unreliable and the potential limitations of the benchmark in such periods.

IBA has consulted publicly on declaring the Auction closed at the Opening Price if the minimum number of Participants for an Auction is not present. The alternative approach could be a No Publication (NP). The consultation paper noted that:

- It may be argued that a representative price discovery process would not be achieved if a minimum number of participants had not logged in to the electronic Auction to have the opportunity to participate or trade at the proposed price, and
- The argument in favour of publishing the Opening Price is that, even when there is no interest in a particular Auction, a Price is published and participants will have had the opportunity to trade at that price. However, there would have been no activity traded at that level and the Price may not be fully representative of the market and, in some instances, NP could be preferable.

The clear feedback from the consultation¹ was that users require a daily benchmark price for contractual certainty - even if the minimum number of Direct Participants for an Auction are not present. Accordingly, if for whatever reason fewer than three Participants are logged on at the commencement of an Auction, IBA will either:

- Not conduct that Auction but declare it closed at the Opening Price, or
- Attempt to begin the Auction up to 60 minutes after the usual Auction start time.

If a delayed Auction cannot begin, that specific Auction will not be run for that day. IBA will nevertheless publish the LBMA Gold and/or Silver Price Benchmarks, as the case may be.

If IBA has sufficient reason to believe that the delayed Auction will not be able to begin, it will not attempt a delayed Auction and will publish the LBMA Gold and Silver Prices as soon as is practical.

If an Auction is not progressing as expected, IBA's Auction rulebook provides measures that can be deployed to protect the integrity of the Auction and the LBMA Gold and Silver Prices benchmarks as follows:

- Pause the Auction and restart — to give participants an opportunity to contact clients or re-evaluate their positions
- Increase the imbalance threshold — if it appears that the Auction will otherwise not finish
- Cancel an order — if it is compromising the integrity of the process and the relevant participant cannot be reached.

¹ https://www.theice.com/publicdocs/IBA_Gold_Feedback_Statement.pdf It should be noted that this predated the introduction of Indirect Participants. An auction will not now be conducted if fewer than three Direct or Indirect Participants are logged on.

5.4 Errors in input data or in the determination of the benchmark

The underlying principles that IBA uses for dealing with errors in the determination of the benchmark are that:

- An individual Auction cannot be rerun
- In extremis, IBA could replace a published Auction price with a No Publication
- If an error were discovered during an Auction, the Auction Round could be stopped and restarted
- If fewer than three Participants are present for the Auction, IBA publishes a price without conducting an Auction – an incorrect price published in such circumstances could be altered if an error were discovered within a short timescale, and
- The non-USD prices are derived indirectly from the Auction and so could be altered if an error were discovered within a short timescale.

An intraday cut-off time for discovering an error has been set at 30 minutes after the conclusion of the relevant Auction. This deadline will be under regular review by the Precious Metals Oversight Committee.

If errors are identified after the cut-off time, IBA would include them in a quarterly notification on IBA's website of the incidence of errors.

IBA will not invoke the above procedure if an input error is made by a Participant.

5.5 Exclusion of data

IBA would only consider removing a valid order from an Auction in exceptional circumstances, for example if IBA had knowledge or strong suspicion of manipulative behaviour.

IBA has established procedures that are designed to identify anomalous or suspicious input data and keep records of decisions to exclude transaction data from the administrator's benchmark calculation process.

5.6 Management of Conflicts of interest

IBA has policies and procedures in place for the identification, disclosure, management or mitigation and avoidance of any conflict of interest and the protection of integrity and independence of benchmark calculations.

IBA's Conflicts of Interest Policy is published at:

https://www.theice.com/publicdocs/IBA_conflicts_of_interest_policy.pdf

5.7 Handling complaints

IBA's complaints handling policy is published at:

https://www.theice.com/publicdocs/IBA_Complaints_Policy.pdf

5.8 External audits

Independent external audits of IBA's compliance with the benchmark methodology for the LBMA Gold and Silver Prices and with the BMR will be carried out annually.

Audits will take place annually and be published three months after each audit is completed. Further interim audits will be carried out if appropriate.

6. Changes to and cessation of a benchmark

Under Article 28 of the BMR, an administrator is required to publish a procedure concerning the actions to be taken by the administrator in the event of changes to or the cessation of the benchmark.

The steps in the Consultation Policy would be followed if IBA proposed to make a material change to the LBMA Gold Price and/or the LBMA Silver Price or to cease producing the benchmark(s). A cessation of the benchmark(s) might be because IBA was not able to continue to produce the benchmark(s) or because there was a fundamental change in the underlying interest that the benchmark seeks to represent.

The factors that would be considered in the context of the cessation of a benchmark are as follows:

- The timing of cessation
- How much notice should be given
- Whether any transitional measures should or could be implemented
- Stakeholder engagement, and
- Identification of possible alternative benchmarks and migration thereto.

If cessation were under consideration, IBA would engage closely with the relevant stakeholders, including:

- The FCA and any other relevant regulatory body
- Users of the benchmark – directly (for example, by email to registered licensees and by conference calls where appropriate), through any relevant association(s) and/or through paid advertisements
- Redistributors of the benchmark, and
- The media.

IBA would also include relevant information and relevant contact details on its website.

IBA's BMR Changes and Cessation Procedure for the LBMA Precious Metals is published at:

https://www.theice.com/publicdocs/Precious_Metals_Changes_and_Cessation_Procedure.pdf

7. Governance

IBA ensures that there is appropriate governance over the IBA Precious Metals Auctions and the LBMA Gold and Silver Prices benchmarks, and that the appropriate standards of conduct are met.

IBA does this through a Code of Conduct that all Participants are required to adhere to and through the Precious Metals Oversight Committee which has broad representation from the gold and silver markets.

The Precious Metals Oversight Committee has the following main responsibilities:

- Reviewing the definition and methodology of the LBMA Gold and Silver Prices at least annually
- Overseeing any changes to the benchmark methodology and requesting IBA to consult on proposed changes
- Overseeing IBA's control framework insofar as it affects the management and operation of the LBMA Gold and Silver Prices
- Overseeing IBA's adherence to its Published Methodologies in respect of the LBMA Gold and Silver Prices
- Assessing internal and external audits or reviews insofar as they affect the LBMA Gold and Silver Prices and monitoring the implementation of identified remedial actions
- Considering existing or potential conflicts of interest and establishing whether they are material.

The full terms of reference of the Committee are published at:

https://www.theice.com/publicdocs/Precious_Metals_Oversight_Committee_Terms_of_Reference.pdf

In addition, the composition of the Committee is published by IBA, along with any declarations of any conflict of interest, at:

<https://www.theice.com/iba/lbma-gold-silver-price>

The Precious Metals Oversight Committee holds a meeting at least quarterly. Public minutes of the Committee's meetings are also published there.

IBA's processes for the election or nomination of Committee members is published at:

https://www.theice.com/publicdocs/IBA_Selection_of_Committee_Members.pdf.

8. Review and updates

This Benchmark Statement is subject to review by the Precious Metals Oversight Committee at least annually.

It will additionally be reviewed and updated if the information it provides is no longer correct or sufficiently precise, including if there is a material change in the methodology for determining the benchmark.

IBA consults with users on important changes to the benchmark calculation processes to gain market acceptance of such changes. IBA's procedures for consultation are published at:

https://www.theice.com/publicdocs/IBA_consultation_process.pdf

IBA's consultation procedures provide advance notice in a clear time frame that gives users sufficient opportunity to analyse and comment on the impact of such proposed changes. Users' comments and IBA's response to those comments are made accessible to all market users after a consultation period, except where the commenter has requested confidentiality.

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