ERROR POLICY CONSULTATION

Introduction

IBA became the Administrator for LIBOR on 1 February 2014 and has strengthened the integrity of ICE LIBOR (formerly known as BBA LIBOR) through enhanced governance and surveillance. As part of its continuing work on enhancing the integrity of LIBOR, IBA is committed to a) minimising the risk of inaccuracies in the publication of ICE LIBOR and b) providing full transparency to stakeholders about any errors in calculating the rate.

Being a BenchmarkSubmitter to LIBOR became an FCA-regulated activity on 2 April 2013 and the Contributing Banks have committed significant resources to put in place robust LIBOR processes and internal governance within their organisations.

Banks are continually enhancing their procedures and controls but IBA is realistic in recognising that errors may still occur from time to time. We therefore wish to articulate clearly and transparently our approach to handling errors identified subsequent to the publication of ICE LIBOR rates.

ICE LIBOR has global significance and is referenced by an estimated US$ 300 trillion of outstanding business in maturities ranging from overnight to more than 30 years. This means that there is a very wide diversity in the interests and priorities of users of ICE LIBOR.

Consultation and interim steps

IBA presents for consultation an error policy that we believe can achieve a balanced compromise between these diverse interests and can promote the objectives of benchmark integrity and transparency.

IBA is grateful for the opportunity to have considered the consultation and feedback statement produced last year by the British Bankers’ Association (BBA) and has found these useful.

We are very aware that any form of “refix” could have considerable implications for a number of parties, as outlined below, and we are very keen to hear the views of stakeholders on the new error policy.

Please provide your feedback by completing the attached consultation questionnaire and returning it to us on or before Friday 19 September 2014.

We also wish to be transparent with regard to the process that we will follow if there is an error before the outcome of this consultation can be implemented. Such transparency is important to provide certainty for users.

In order to minimise as far as possible the adverse effects of the interim measures, we are setting the parameters associated with these interim steps deliberately widely.
Considerations

There are many considerations associated with an error policy for ICE LIBOR, including

- promoting and maintaining the integrity and transparency of ICE LIBOR
- achieving an accurate and reliable representation of the underlying interest
- complying with international best practice standards and regulation
- acknowledging the operational impacts on users of ICE LIBOR
- safeguarding contractual integrity
- considering the merits of reducing the number of decimal points to which ICE LIBOR is calculated, and
- facilitating an orderly market transition by implementing any new policy in a way which minimises disruption for market participants.

These considerations would suggest:

- a threshold for materiality of errors
- a cut-off time for reporting an error to IBA for any intraday refix
- transparency for errors discovered after the cut-off time, and
- allowing a sufficiently long notice period before the changes come into effect.

Operational impacts

Considerable efforts are made by IBA, the Calculation Agent and the Benchmark Submitters to ensure that ICE LIBOR is not susceptible to errors. However, it would be imprudent to assume that errors may not arise from time to time despite the many systems and controls in place.

Given the breadth of outstanding business referencing LIBOR, the many users of the benchmark will have varied needs and priorities from the error policy. A number of operational implications will arise, including that:

- market participants will be exposed to basis risk if their hedging of a contract referencing ICE LIBOR is valued at the refix rate
- contingent transactions and option exercises may be automatically triggered as a consequence of a refix without either party necessarily anticipating or wanting the resulting transaction, and
- significant time and effort may be expended in amending downstream transactions if the refix values are used.
Threshold for materiality of errors

IBA has data on errors dating back since 1 August 2013. In the year since then, the most significant error had an impact of 0.0036% on published LIBOR. The next two most significant errors in all LIBOR tenors and currencies affected the relevant rate by 0.003% per annum, after rounding to the nearest one tenth of a basis point.

Two other errors would each have resulted in an adjustment of approximately 0.0015% and one other error would have resulted in an adjustment of approximately 0.0005%. There were also 6 other errors, none of which would have had an effect on the calculation.

Cut-off time for intraday refix

The reasons for errors have included technical issues at panel banks, misallocation by banks of supporting transactions and booking a trade in the wrong currency. Errors are usually discovered during post-submission compliance checks on the day of submission but may not be found until a later occasion.

A cut-off time is needed for an intraday refix and 15.00 London time seems the most likely to accommodate each of the following steps:

- an error to be found
- IBA to be informed and to publish a refix, and
- users of ICE LIBOR to make any adjustments required as a consequence of the refix.

IBA encourages respondents to comment on their views on the appropriateness of 15.00 London time as the cut-off time for an error to be reported to IBA.

Transparency of later or smaller errors

As commented above, some errors may be identified after the cut-off time for an intraday refix - possibly weeks or months later during the course of an audit, for example.

IBA intends to publish on a quarterly basis the incidence of errors. This will include errors that did not lead to an intraday refix, either because the error came to light after the cut-off time for the relevant day or because the error was smaller than the materiality threshold. The absolute change in published ICE LIBOR would be stated but not the direction of change.

The following errors potentially affecting the calculation of ICE LIBOR have been brought to IBA’s attention since we became the Administrator for Libor on 1 February 2014:

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Error by</th>
<th>Absolute change in published ICE LIBOR</th>
<th>Refix if the error policy had been in place?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17.02.14</td>
<td>Calculation Agent</td>
<td>None</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>01.05.14</td>
<td>Panel bank</td>
<td>0.0036%</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>04.06.14</td>
<td>Calculation Agent</td>
<td>None</td>
<td>No</td>
</tr>
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</table>
**IOSCO Principles**

Principle 16 (Complaints Procedures) of IOSCO’s Principles for Benchmarks states that Administrators should have a detailed process to follow in the event that a complaint results in a Benchmark determination being changed.

It is envisaged that any determination of ICE LIBOR which is changed following a complaint will be notified in the quarterly publication of errors since it is unlikely that a considered response to a complaint would fall within the time parameters identified above for intraday refixing.

**Calculation of ICE LIBOR to 5 decimal places**

ICE LIBOR is calculated to 5 decimal places. It is recognised that the impact of errors could be minimised by calculating LIBOR to fewer decimal places.

We would welcome views on the respective advantages and disadvantages of changing the number of decimal places.

**Notice period**

IBA will need to review the thresholds periodically to accommodate different rate environments. We welcome your views on what would be a suitable notice period for the parameters to be updated, both following this consultation and following periodic reviews of the thresholds.

**Interim arrangements**

IBA is committed to being transparent with regard to the process that we would follow in the event of a material error occurring before the consultation can be completed and the outcome can be implemented.

As an interim step, and recognising that the parameters will likely be refined after the consultation, IBA will conduct a refix if each of the conditions set out below is satisfied in the interim period before the consultation arrangements are implemented.

The conditions are that:

- The error is reported and confirmed to IBA before 15.00 London time on the relevant day
- The published ICE LIBOR would be affected by 0.03% or more, and
- In the extreme scenario in which IBA conducted a refix and a further error were subsequently reported, no further refix would be published that day even if the first two conditions above were satisfied in respect of the second or further error.

**Next steps**

IBA welcomes views on the error policy. Please complete and return the attached questionnaire on or before 19 September 2014.

IBA will then analyse the responses in conjunction with the Oversight Committee.

A feedback statement will be published with stakeholders’ summary comments and IBA’s summary response to those comments, except where the commenter has requested confidentiality.
CONSULTATION QUESTIONNAIRE

Please provide your feedback by returning your completed questionnaire to IBA on or before Friday 19 September 2014

<table>
<thead>
<tr>
<th>Name of respondent</th>
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<tbody>
<tr>
<td>Position</td>
<td></td>
</tr>
<tr>
<td>Organisation (if any)</td>
<td></td>
</tr>
<tr>
<td>Contact telephone</td>
<td></td>
</tr>
</tbody>
</table>

1. **Intraday refix cut-off time**
A cut-off of 15.00 London time for reporting an error to IBA is the interim policy for an intraday refix.

   - **Your preferred cut-off**
   - **Your earliest cut-off**
   - **Your latest cut-off**

2. **What materiality threshold of the published rate would you choose?**
   Under the interim policy, an error of less than 3 basis points on the published rate would not trigger an intra-day fix.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Is there a minimum in basis points?</th>
</tr>
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<tbody>
<tr>
<td>Preference</td>
<td>Yes / No</td>
</tr>
<tr>
<td>Lowest</td>
<td>If Yes, what is the minimum value?</td>
</tr>
<tr>
<td>Highest</td>
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</table>

   Please comment on your choice:

3. **If you need a notice period for changes in the threshold, what would it be?**
   We will need to review the thresholds periodically to accommodate different rate environments.

   If Yes, how long would you need?
4. To what number of decimal places do you think ICE LIBOR should be published?

ICE LIBOR is currently published to 5 decimal places.

<table>
<thead>
<tr>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (NO CHANGE)</th>
<th>6</th>
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5. Please add any additional comments:

Please email your completed questionnaire to: ICE Benchmark Administration Limited
IBA@theice.com Milton Gate
on or before Friday 19 September 2014 60 Chiswell St
or post it to arrive by that date. London
EC1Y 4SA