

**Consultation on refinements to the
error correction policy for financial
benchmarks administered by the
Treasury Markets Association**

About this document

1. This paper is published by Treasury Markets Association (TMA) and seeks to consult the market on refinements to the error correction policy for financial benchmarks administrated by the TMA (the “TMA-administrated benchmarks”). The policy focuses on the scenario of revision of a benchmark rate after initial publication where applicable.
2. Interested parties are invited to respond to the consultation questions using the *pro forma* at the attachment – **Response to consultation**. Comments should be submitted in writing to the TMA Secretariat no later than **24 February 2017** by *any one* of the following channels –

(1) By mail

TMA Secretariat
55/F, Two International Finance
Centre 8 Finance Street, Central, Hong
Kong

(2) By fax

+852 2878 7297

(3) By email

consultation@tma.org.hk AND akfkwok@hkma.gov.hk

3. After considering the consultation feedback, the TMA will refine the proposal as appropriate, and will release a response to the feedback received.
4. Any persons submitting comments on behalf of any organisation are requested to provide details of the organisation they represent.
5. Feedback will be received on the basis that the TMA may freely reproduce and publish them, in whole or in part, in any form; and may use, adapt or develop any proposal put forward without

seeking permission from or providing acknowledgement to the party making the proposal.

6. Please note that the names of respondents, their affiliations and the contents of their feedback may be published or reproduced by the TMA. *If you do not wish* the TMA to disclose the fact that you have provided feedback to the consultation, please state this clearly when making your feedback.

7. Any personal data received by the TMA through consultation feedback will only be used for purposes directly related to this consultation. Such data may be transferred to other parties for the same purposes. For access to or correction of personal data contained in your feedback please contact the TMA Secretariat by email:

consultation@tma.org.hk **AND** akfkwok@hkma.gov.hk.

CONTENTS

1 – EXECUTIVE SUMMARY -----	P.5
2 – BACKGROUND -----	P.6
3 – EXISTING ARRANGEMENTS -----	P.7
4 – PROPOSED CHANGES -----	P.8
5 – NEXT STEPS -----	P.12

1. EXECUTIVE SUMMARY

- 1.1. The robustness and transparency of financial benchmarks such as interest rate and foreign exchange (FX) benchmarks is crucial to the well-functioning of the financial market.
- 1.2. As the administrator of Hong Kong's interest rate and FX benchmarks, the TMA has reviewed the error correction policy for the TMA-administrated benchmarks, drawing reference from the prevailing international recommendations and practices. The review suggests refining the policy as follows:

<i>Summary of proposal</i>		
	HIBOR & ONIA	FX Spot Rates
Revision of published benchmark rates	Possible subject to conditions (a) and (b) below	
(a) Cut-off time for reporting error	Consider errors that come into light within 60 minutes after initial publication	
(b) Materiality threshold for proceeding with revising a published benchmark rate	Proceed if the revision would change the published benchmark rate by at least 3 basis points	Nil (i.e. proceed as long as the revision would result in a change in the published benchmark rate)
Cut-off time for revising benchmark rates	If there is any revision, revised rates will be published within 1 hour and 50 minutes after initial publication	
Disclosure of incidences of errors	Within one month after the end of each quarter, publish error identified in the past quarter (date, error nature, and how much published rate has been or would have been revised) on an anonymous basis, regardless of whether the error has led to a revision.	
Notice period for implementation	Three months	

- 1.3. The TMA would like to invite market's views on the proposed changes. It will take into account the feedback received as appropriate in deciding how to implement the refinements.

2. BACKGROUND

- 2.1. There has been international effort, e.g. by the International Organization of Securities Commissions (IOSCO), in improving the robustness and transparency of financial benchmarks. Furthermore, in June 2016, the European Parliament passed a legislation (the “EU Benchmark Regulation”), whereby EU-supervised entities will be prohibited from using benchmarks provided by administrators not fulfilling EU Benchmark Regulation. In particular, benchmark administrators outside the EU (e.g. the TMA) need to obtain a suitable status from the European authorities before their benchmarks could be used by EU-supervised entities. To do so, benchmark administrators should adhere to a set of standards developed with reference to the Principles for Financial Benchmarks issued by IOSCO (the “IOSCO Principles”)¹. The EU Benchmark Regulation is taking effect by phases, and no third country benchmark without a suitable status will be allowed by 2020.
- 2.2. As the administrator of Hong Kong’s interest rate and FX benchmarks, the TMA recently reviewed the error correction policy for the TMA-administrated benchmarks, including possible revisions to the benchmark rates after initial publication. It is noted that there have only been a handful of instances of revision of the benchmark rates², suggesting that the existing arrangements are reasonably robust. Nonetheless, drawing reference from practices adopted for other major benchmarks (e.g. the LIBOR, EURIBOR, and WM/Reuters 4 pm London Fix), there is scope for refinements, which would enable the TMA-administrated benchmarks to better follow the IOSCO Principles, i.e. a necessary condition for obtaining a suitable status under the EU Benchmark Regulation.

¹ Principles for Financial Benchmarks: www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf

² HKD HIBOR (since TMA taking up administration in July 2013): 1

CNH HIBOR (since the launch in 2013): 3

HKD HONIA (since TMA taking up of administration in April 2016): Nil

TMA FX Spot Rates (since transition to transaction-based in August 2016): Nil

- 2.3. The TMA Surveillance and Governance Committee and the Market Practices Committee have reviewed the proposed changes, and supported consulting the market on the changes.
- 2.4. TMA-administrated benchmarks covered by the review include:
- (a) HIBOR (currently calculated for HKD and CNH);
 - (b) ONIA (currently calculated for HKD); and
 - (c) FX Spot Rates (currently calculated for USD/HKD and USD/CNY(HK)).

3. EXISTING ARRANGEMENTS

- 3.1. At present, there will be intraday revisions to the published rates of HIBOR and FX Spot Rates if the following two types of errors are identified subsequent to the initial publication of the benchmark rates:
- (a) Calculation error: this type of error is rare as the calculation system is fully automated with extensive testing; and
 - (b) Contribution error: contributions are more prone to error if manual input is required.

The error correction arrangements, including the timelines, are made available at the TMA website. While such arrangements vary across different benchmarks somewhat, in gist, there would be an intraday revision of the rates if errors come into light by a cut-off time, which is different across benchmarks³, regardless of how much the revision would change the published benchmark rates.⁴ There will be no revisions of the benchmark rates after the stated timeline. HONIA does not have an error correction policy that is made available to the

³ For HIBOR, errors identified within 60 minutes after the initial publication at 11:15 am would be processed. The revised rate would be published by 1:05 pm, i.e. 1 hour 50 minutes after initial publication.

For FX Spot Rates, errors identified within 60 minutes after the initial publication at 11:30 am would be processed. The revised rate would be published by 1:00 pm, i.e. 90 minutes after initial publication. ONIA does not currently have a revision arrangement that is made available to the public.

⁴ If the revision is owing to a contribution error, the underlying contributions will be corrected as well.

public.

- 3.2. The existing arrangements have the benefit of reducing inaccuracies in rate publications. This is conducive to promoting the integrity and transparency of the benchmark.
- 3.3. However, it is worth noting that large majority of the revisions were for minor changes only (e.g. less than 1 basis point), and that certain risks are involved in revising a benchmark rate after its initial publication:
 - (a) Significant time and effort may be required to amend transactions that are linked to a specific benchmark rate, as those transactions may have already been executed at the initially published rate;
 - (b) Market participants may be exposed to basis risk if they have already hedged their positions based on the initial publication but the rates are subsequently revised; and
 - (c) Possible confusion or misinterpretation by market participants on which is the correct benchmark rate.

4. PROPOSED CHANGES

- 4.1. Drawing reference from the prevailing international recommendations and policies adopted for other major benchmarks, the TMA would like to recommend the following:
 - (a) making consistent the error correction policies for the various benchmarks as appropriate to minimise undue confusion;
 - (b) introducing a materiality threshold for interest rate benchmarks, below which there would not be a revision of the published rates;
 - (c) increasing the transparency for identified errors; and
 - (d) a three-month notice period for implementing the changes.

Details are discussed in the ensuing paragraphs.

Recommendation 1: Make consistent the error correction policies

4.2. The TMA proposes:

- (a) explicitly stating in the specifications of the TMA-administrated benchmarks that the benchmarks are subject to revision, since it is currently unclear as to whether ONIA can be revised after initial publication; and
- (b) adopting a uniform timeline for rate revision across benchmarks.

4.3. Specifically on timeline, it is proposed that revision of rates for the TMA-administrated benchmarks should follow the standard timeline set out at **Table 1, Annex**. In gist, errors that come to the attention of the TMA within 1 hour after the initial publication would be considered, and the revised benchmark rates (if applicable) should be published within 1 hour 50 minutes after the initial rate publication.⁵ In other words, ***the prevailing rates at 1 hour 50 minutes after initial publication are deemed to be final***. The above timeline also applies to the correction of errors in individual contributions. It should be noted that ***the above is the existing arrangement for majority (but not all) of the TMA-administrated benchmarks***.

Question 1

Do you agree that the specifications of the TMA-administrated benchmarks should state that the benchmarks are subject to revision?

Question 2

Do you agree that we should adopt the same timeline for making revisions to the published rates of the TMA-administrated benchmarks, i.e. (a) standardise the cut-off for notification of errors as 1 hour after initial publication; and (b) errors eligible for revision should be corrected by 1 hour 50 minutes after initial publication?

⁵ The TMA will use not more than 50 minutes for assessing the impact of the error, recalculation, and verification.

Recommendation 2: A “materiality threshold” for interest rate benchmarks

- 4.4. To strike a balance between ensuring the accuracy of the rates and mitigating undue risks that might be brought along by a rate revision, it is recommended that ***a “materiality threshold” be introduced: if the absolute difference between the revised rate and the published rate is below the threshold, HIBOR and ONIA would not be revised in spite of error. This is consistent with the arrangements currently adopted for LIBOR and EURIBOR.***
- 4.5. In determining a “materiality threshold” for the interest rate benchmarks, especially HIBOR, reference is drawn from LIBOR and EURIBOR. It is noted that they use different thresholds: 3 basis points for LIBOR and 2 basis points for EURIBOR. Since the setup of HIBOR is more akin to LIBOR than EURIBOR, there would be ***merits for HIBOR in adopting the 3 basis points used by LIBOR.*** It is also worth noting that, subject to market feedback, this threshold is adjustable in the future.
- 4.6. Meanwhile, the FX Spot Rates are calculated based on transaction records of actual executed transactions sourced directly from the contributing brokers. Thus, the TMA considers that the risks of contribution error are low. It is worth noting that calculation error has not happened in the past. Moreover, the other major FX benchmark rates that are subject to revisions do not establish any “materiality threshold”.⁶ In view of the above, the TMA considers that a ***“materiality threshold” would not be necessary in the error correction policy of the FX Spot Rates.***

Question 3

Do you agree that any revision of HIBOR and ONIA should be subject to a “materiality threshold” (i.e. below which the benchmark rates would not be revised after initial publication), in a manner similar to

⁶ For example, the WM/Reuters 4 pm London Fix; Bloomberg’s BFIX; Singapore’s USD/SGD; and ECB’s reference rates.

other major interest rate benchmarks such as LIBOR and EURIBOR?

Question 4

If you agree that a threshold should be set for revisions of HIBOR and ONIA, do you agree that it should be 3 basis points, i.e. same as LIBOR?

Question 5

*Do you agree that a “materiality threshold” would **not** be needed in the error correction policy of the FX Spot Rates, i.e. same as other major FX spot benchmarks including the WM/Reuters 4 pm London Fix?*

Recommendation 3: Increasing the transparency of errors

- 4.7. The TMA proposes the following to increase transparency:
- (a) ***Overall transparency***: Error correction policies will be made available to the public when finalised;
 - (b) ***Pre-revision transparency***: For incidents that come to light before the 1-hour cut-off proposed in Recommendation 1, an interim message will be released to the public to indicate the rate may be revised by the stated timeline.
 - (c) ***Post-revision transparency***: Revised rates will be clearly marked; and
 - (d) ***Publication of incidences of errors***: Within one month after the end of each quarter, TMA will publish incidences of error in the past quarter for individual benchmarks, including errors that did not lead to a revision (e.g. because the error comes to light after the notification cut-off, or the impact of the error on the published rate is smaller than the materiality threshold). The date, nature of error, and the actual/potential magnitude of change of the published benchmark rates will be stated. The party leading to the error would not be stated, i.e. the reports will be published on an anonymous basis.

The above is similar to the arrangements of LIBOR and EURIBOR.

Question 6

Do you agree with the recommendations for increasing transparency of error corrections, i.e. (a) publishing the error correction policy; (b) publishing an interim message that the benchmark rates may be revised; (c) clearly indicating any revised benchmark rates; and (d) within one month after the end of each quarter, publishing incidences of error in the past quarter on an anonymous basis, including those not leading to a revision?

Recommendation 4: A three-month notice period for the transition

- 4.8. The TMA considers a three-month notice period appropriate for the market to prepare for the transition to the refined error correction arrangements.

Question 7

*Do you agree with a **three-month** notice period for transition?*

5. NEXT STEPS

- 5.1. The TMA welcomes comments on the proposed refinements. As part of the consultation process, the TMA may engage key stakeholders and relevant industry associations. Those parties will be directly contacted.
- 5.2. Following the consultation period, the TMA will provide a summary of comments received along with a response, and a detailed implementation timeline for changes.

Table 1 - Timeline for revision of published benchmark rates⁷

<u>Action</u>	<u>To take place...</u>
Initial publication of the benchmark rates	<i>Time for reference</i> HIBOR: 11:15 am ONIA: 5:00 pm FX Spot: 11:30 am
A Contributor ⁸ /Calculation Agent/other parties notify the TMA of error	Within 1 hour after initial publication <i>Time for reference</i> HIBOR: By 12:15 pm ONIA: By 6:00 pm FX Spot: By 12:30 pm
The Calculation Agent provides assessment on impact on the published rate	Within 20 minutes after receiving notification of error <i>Time for reference</i> HIBOR: By 12:35 pm ONIA: By 6:20 pm FX Spot: By 12:50 pm
TMA makes decision on whether to perform a revision <i>* Not to perform revision if impact is smaller than the prevailing materiality threshold *</i>	Within 10 minutes after receiving the Calculation Agent's assessment of the impact <i>Time for reference</i> HIBOR: By 12:45 pm ONIA: By 6:30 pm FX Spot: By 1:00 pm
Publish the revised rate, and indicate on publication sites the published rate is revised owing to error	Within 20 minutes after the TMA's decision to perform revision <i>Time for reference</i> HIBOR: By 1:05 pm ONIA: By 6:50 pm FX Spot: By 1:20 pm
Total time after initial publication	Maximum: 1 hour 50 minutes

⁷ All time for reference is Hong Kong time.

⁸ Only applies to HIBOR and ONIA. In the specifications of the FX Spot Rates, it is mentioned that trade details received by 11:25 am are deemed to be correct and final.