

DFBF Benchmarks
Post Publication Re-determination Policy

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1 Introduction

This policy has been developed to outline the steps the DFBF, as administrator of the Benchmarks¹, will take in situations where erroneous Benchmark data has been discovered to have been published. The rationale in respect to developing this re-determination policy balances the inconvenience to end-users of a re-determination (and the potential for market disruption) with the overriding requirement that the Benchmarks must be an accurate reflection of the underlying economic reality that it is designed to measure.

Variations beyond a prescribed threshold would trigger a re-determination and distribution of new Benchmark values (re-determined values).

Re-determination will only take place on the day of publication and within a timeframe determined by the DFBF and endorsed by the DFBF Benchmark(s) Oversight Committee (OC).

This policy describes:

- Governance of the policy
- Rationale for re-determination
- Examples of erroneous data and Benchmark calculation errors
- Thresholds for re-determination
- Processes and procedures for re-determination
- Notifications to the market
- Record keeping

2 Governance

The re-determination policy will be the responsibility of the DFBF Board (the Board).

The OC will review and endorse the policy or make recommendations regarding how the policy could be improved.

The DFBF will oversee all operational procedures, and in the case of a re-determination will manage the processes in accordance with this policy.

Panel Banks, through their responsibilities outlined in the Panel Bank Code of Conduct, will be responsible for ensuring that any errors in Input Data are reported to the DFBF in accordance with this policy.

2.1 Policy Review

This policy will be reviewed on an annual basis.

3 Rationale for Re-determination Policy

In the case that the DFBF publishes Benchmark values that do not accurately reflect the calculation methodology, and which would have a material effect on the users of the Benchmark, a re-determination of affected values will allow any material errors to be corrected within a reasonable timeframe.

¹ CIBOR®, Tom/Next, CITA, SWAP

3.1 Examples of Potential Errors in the Benchmarks Publication

There are two principle reasons why the Benchmarks values published, during the normal course of operations may be erroneous as detailed in 3.1.1 and 3.1.2 below.

3.1.1 CALCULATING AGENT SYSTEM CALCULATION ERROR OR DISTRIBUTION ERROR

The DFBF has policies and procedures to accurately capture Input Data from Panel Banks via secure connections.

Once collected, data validation processes check the incoming data for anomalies. The Helpdesk will, if required under its procedures, check any anomalous submissions directly with the Panel Bank and seek clarification on the validity of the Input Data.

The Helpdesk checks that the methodology is correctly applied via manual checks and compares this to the calculations made by the Calculating Agent System. Once these checks are completed the final Benchmark values are distributed to information vendors for publication. Checks are made at the time of publication to ensure that published values correspond with the Calculating Agent System and manual calculations.

Errors in the procedural calculation steps taken by the system, and the manual comparison checks made by operators could lead to errors in publication.

The Calculation Agent System may, due to internal systems errors, publish rates different from those calculated and displayed to operators.

These errors would be discovered by verification checks of the Calculation Agent System displayed values against those published by vendors.

3.1.2 PANEL BANK ERROR WHEN SUBMITTING INPUT DATA

Erroneous Input Data by one or more Panel Banks may cause the final Benchmark value/s to be considered “materially altered” after the calculation methodology is applied.

Panel Banks are required to meet the Input Data rules as defined in the Panel Bank Code of Conduct. Panel Banks are required to have policies and procedures to ensure Input Data meets the criteria set down by the DFBF.

There are two potential opportunities for erroneous Input Data;

- I. Panel Banks have erroneously supplied Input Data to the Calculating Agent System (incorrect submission) and have not been able to remediate prior to the cut off time for submissions or have discovered this after the calculation methodology has been applied
- II. Panel Banks have used an automated method to submit Input Data to the Calculating Agent System and through this process erroneous Input Data was submitted and could not be remediated prior to the cut off time for submissions.

4 Threshold for Re-determination

The DFBF and the OC have considered the implications of a re-determination of one or more tenor rates or volume (if applicable) sometime after publication and the impact on users of the Benchmarks² in making such a change.

The OC has determined that beyond an agreed threshold for each tenor, a re-determination should take place for any affected tenor. In case of Tom/Next, re-determination should take place for both rate and volume should either value's threshold be breached.

The thresholds for a re-determination for each value are as follows:

4.1.1 CIBOR

1 week	> +/- 1 basis points
2 weeks	> +/- 1 basis points
1 month	> +/- 1 basis points
2 months	> +/- 1 basis points
3 months	> +/- 1 basis points
6 months	> +/- 1 basis points
9 months	> +/- 1 basis points
1 year	> +/- 1 basis points

4.1.2 TOM/NEXT

Tom/Next	> +/- 1 basis points
Volume	100 mil. DKK

4.1.3 SWAP

2 years	> +/- 2 basis points
3 years	> +/- 2 basis points
4 years	> +/- 2 basis points
5 years	> +/- 2 basis points
6 years	> +/- 2 basis points

² CIBOR®, Tom/Next, CITA, SWAP

7 years	> +/- 2 basis points
8 years	> +/- 2 basis points
9 years	> +/- 2 basis points
10 years	> +/- 2 basis points

4.1.4 CITA

1 month	> +/- 2 basis points
2 months	> +/- 2 basis points
3 months	> +/- 2 basis points
6 months	> +/- 2 basis points
9 months	> +/- 2 basis points
12 months	> +/- 2 basis points

4.2 Variations to Threshold Values

The OC is responsible for making recommendations to the Board for changes to the threshold levels. Once approved by the Board, the re-determination policy will be updated and all stakeholders notified of the changes and the date when the changes will become effective.

4.3 Example of Threshold Application

The following is an example of how the re-determination policy would be applied:

- The one-month tenor has been calculated based on all Input Data (for the one-month tenor) provided by Panel Banks. The rate -0.25 has been calculated and published at 11:00am.
- A Panel Bank contacts the Helpdesk and informs them that they have provided the wrong Input Data for the one-month tenor after the calculation. They provide new Input Data for the one-month tenor.
- The Helpdesk recalculates the one-month tenor, replacing the erroneous tenor value from the Panel Bank with the revised value.
- The new value for the one-month tenor is calculated at -0.28. The threshold for the one-month tenor is +/- 0.01
- This new value exceeds the change threshold and will result in the new value of -0.28 being published as a re-determined rate.

5 Process for Re-determination

The re-determination process will have a number of stages.

Benchmark	Timings	Actions
CIBOR Tom/Next CITA SWAP	11:00am – 1:00pm 12:00am- 1:00pm 11:00am – 1:00pm 11:30am – 1:00pm	Notification of erroneous data or Benchmark values
CIBOR Tom/Next CITA SWAP	1:00pm – 2:00pm 1:00pm – 2:00pm 1:00pm – 2:00pm 1:00pm – 2:00pm	Checks to determine if the corrected value meets threshold for re-determination
CIBOR Tom/Next CITA SWAP	2:00pm 2:00pm 2:00pm 2:00pm	Notification to stakeholders that a re-determination of value/s will take place
CIBOR Tom/Next CITA SWAP	3:00pm 3:00pm 3:00pm 3:00pm	DFBF will publish re-determined values and all Panel Bank submissions to final Benchmark values

5.1 Notification of Erroneous Input Data by Panel Banks or the Benchmarks Calculations

Panel Banks have a responsibility to notify the Helpdesk immediately on discovery of erroneous Input Data. Panel Banks will be able to notify the Helpdesk of any erroneous Input Data for the purposes of a re-determination calculation any-time after the initial publication and prior to 1:00pm each day. Any other erroneous Input Data reported outside of the notification period will be documented and presented to the OC for consideration. Summary of such erroneous Input Data will be also published on the DFBF Website at www.dfbf.dk on a quarterly basis following presentation to the OC.

5.2 Method of Notification

Panel Banks will provide details of the original values supplied and the corrected values via a template provided by the Helpdesk for this purpose. The Panel Bank will need to provide authorisation from the original submitter and a senior representative of the bank.

On receipt of the template the Helpdesk will contact the bank and confirm the corrected values.

5.3 Determination of Corrected Benchmarks Values

The Helpdesk will recalculate the Benchmark with the corrected values and determine new Benchmark values.

5.4 Threshold Comparison

The Helpdesk will compare the new Benchmark values against the published values and determine if the threshold for re-determination has been exceeded.

In the case that the value does not meet the threshold, no further action will be taken and no re-determination will occur.

In the case that the threshold has been exceeded, preparations for the next steps in the re-determination process will be activated.

5.5 Market Communication

The DFBF will communicate to the market as soon as a re-determination is required, but no later than 2:00pm.

The means of communicating that a re-determination will take place includes:

1. An update on the DFBF Website.
2. Email communications and telephone calls with information vendors to advise of a re-determination and for them to advise their customers via market alerts of a re-determination.

5.6 Publication of Re-determined Values

The DFBF will republish all re-determined values at 3:00pm.

5.7 Tom/Next Special Provisions

In case of an error in Tom/Next Reported Volume, the second round of Tom/Next (if it took place) will be annulled and the process of Tom/Next determination will be reverted to the state as it was after the first round, recalculated with the corrected Turnover Volume.

If the recalculated Turnover Volume is less than DKK 3000 mil., an entirely new second round will be conducted, requiring all Panel Banks to submit their updated second round contributions. These contributions should be collected from the Panel Banks by 2:45pm at the latest. Should not all Panel Banks be able to submit their updated second round contributions in time, the standard quorum rules apply.

6 Reporting

6.1 Calculating Agent Calculation Error or Distribution Error

Any incidents of calculation error or distribution error will be documented and reported to the OC for consideration.

6.2 Panel Bank Reporting

The DFBB will request further information from the Panel Bank that provided erroneous Input Data and this will be evaluated by the DFBB and will be reviewed by the OC. Panel Banks must provide a root cause analysis of the error and procedures they intend to put in place to rectify the situation in the future.

6.3 DFBB Records

The DFBB will store the original published values and the re-determined values in its Calculating Agent System. The final re-determined values will be used for all analytical purposes as the official values for that day.

6.4 Procedural Records

The DFBB will keep records of the following:

- Communications with the Panel Bank that advised of erroneous Input Data
- Template with corrected values and internal sign off by the Panel Bank
- Procedural steps and internal sign-off
- Internal communication confirming the re-determination
- Incident report regarding re-determination.

7 Effect

The procedures detailed in this document shall take effect on 30 September 2020.