

# EURIBOR Benchmark Statement

## Document Information

Document Title:	EURIBOR Benchmark Statement	Status:	<b>FINAL VERSION</b>
Business Area:	Benchmarks Governance	Date:	17 July 2019
EMMI Reference No.	D0246A-2019		
Sensitivity:	<b>Public Document</b>		

## Table of Contents

1. INTRODUCTION .....	3
2. GENERAL INFORMATION.....	4
3. MARKET OR ECONOMIC REALITY .....	5
4. INPUT DATA AND METHODOLOGY.....	6
5. EXERCISE OF JUDGEMENT OR DISCRETION BY THE ADMINISTRATOR OR CONTRIBUTORS.....	10
6. CESSATION AND CHANGE OF THE METHODOLOGY .....	13
7. POTENTIAL LIMITATIONS OF THE BENCHMARK.....	15
8. SPECIFIC DISCLOSURES FOR INTEREST RATE AND CRITICAL BENCHMARKS.....	17
ANNEX 1: KEY TERMS .....	20
ANNEX 2: REFERENCE DOCUMENTS .....	22

## 1. INTRODUCTION

This benchmark statement is published by the European Money Markets Institute (EMMI) for the administration of EURIBOR.

It fulfills the requirements of [Regulation \(EU\) 2016/1011](#) of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investments funds and on [related Delegated and Implementing Acts](#).

It should be read in conjunction with the EURIBOR Governance Framework and related policies and procedures, which are listed in Annex 1 of the benchmark statement.

EURIBOR has been designated as a critical benchmark in [Commission Implementing Regulation \(EU\) 2016/1368](#) of 11 August 2016 establishing a list of critical benchmarks used in financial markets pursuant to Regulation (EU) 2016/1011 of the European Parliament and of the Council. This decision was made on the basis of the estimation that EURIBOR underpins more than EUR 180 000 billion worth of contracts, including interest rate swaps and more than EUR 1 000 billion of retail mortgages.<sup>1</sup>

EMMI was authorised by the Belgian Financial Services and Markets Authority for the administration of EURIBOR on 2 July 2019 and was included in the ESMA Register of benchmark administrators on 4 July 2019.

---

<sup>1</sup> See [Commission Implementing Regulation \(EU\) 2016/1368 of 11 August 2016](#), recital (5).

## 2. GENERAL INFORMATION

<b>Benchmark name</b>	EURIBOR
<b>Date of publication</b> <b>RTS 27, 1.1(a)</b>	17 July 2019
<b>Date of last update</b> <b>RTS 27, 1.1(a)</b>	17 July 2019
<b>Review of the Benchmark Statement</b> <b>BMR 27, 1</b> <b>RTS 27, 6</b>	EMMI will review and update, as necessary, this benchmark statement at least every two years and whenever the information contained in the statement ceases to be correct or sufficiently precise, including in any event in the following cases: (a) whenever there is a change in the type of the benchmark; (b) whenever there is a material change in the methodology used for determining the benchmark or, if the benchmark statement is for a family of benchmarks, in the methodology used for determining any benchmark within the family of benchmarks.
<b>ISN (where available)</b> <b>RTS 27, 1.1(b)</b>	N/A
<b>Contributions of input data</b> <b>RTS 27, 1.1(c)</b>	EURIBOR is based on contributions from panel banks. The list of panel banks is available <a href="#">here</a> .
<b>Type of benchmark</b> <b>RTS 27, 1.1(d)</b>	EURIBOR is a critical interest rate benchmark and is therefore subject to the enhanced regulatory regime applicable to critical benchmarks (chapter 4 BMR) and to the additional regulatory regime under Annex I of BMR.
<b>Definition of Key Terms</b> <b>BMR 27, 2(a)</b>	Key Terms are provided in Annex 1 to this statement.

### 3. MARKET OR ECONOMIC REALITY

<p><b>Market or economic reality measured by the benchmark</b>  <b>BMR 27, 1</b>  <b>RTS 27, 1.2(a)</b></p>	<p>EURIBOR measures the cost of wholesale funding of credit institutions in the unsecured euro money market. EURIBOR is measured and calculated for five separate tenors: 1 week, 1 month, 3 months, 6 months, and 12 months.</p>
<p><b>Geographical boundaries of the economic reality measured by the benchmark</b>  <b>RTS 27, 1.2(b)</b></p>	<p>EURIBOR measures the cost of funding of credit institutions located in the European Union (EU) and European Free Trade Association (EFTA) member countries.</p>
<p><b>Actual or potential participants in the market</b>  <b>Size of the market or economic reality</b>  <b>RTS 27, 1.2(c)</b></p>	<p>The actual and potential participants in the underlying market for EURIBOR consist of credit institutions located in the EU and EFTA countries.</p> <p>The total daily average turnover of unsecured wholesale borrowing reported by the 50 banks participating in the European Central Bank's (ECB) Money Market Statistical Reporting (MMSR)<sup>2</sup> dataset was approximately EUR 126 billion during the third maintenance period of 2019.<sup>3</sup></p>

<sup>2</sup> Regulation (EU) No 1333/2014 of the European Central Bank of 26 November 2014 concerning statistics on the money markets (ECB/2014/48).

<sup>3</sup> See the European Central Bank's [press release](#) from 2 July 2019.

#### 4. INPUT DATA AND METHODOLOGY

<p><b>Rationale for adopting the benchmark methodology</b></p> <p><b>BMR 27, 2(b)</b></p>	<p>The hybrid methodology has been developed taking into consideration the guidelines and requirements provided by the IOSCO Principles for Financial Benchmarks and the Regulation (EU) 2016/1011 (BMR), as well as other industry initiatives. In particular, all the recommendations and regulatory requirements are based on the principle that a benchmark should be “anchored in an active market having observable, bona-fide, arm’s-length transactions”. The legacy EURIBOR methodology based on collecting quotes from contributing banks and the use of expert judgment was not compliant with this principle.</p> <p>In 2016-2017, EMMI conducted the Pre-live Verification exercise to determine the feasibility of a fully transaction-based methodology for EURIBOR. The conclusion of the exercise was that, under the current market conditions it will not be feasible to evolve the legacy EURIBOR methodology to a fully transaction-based methodology.</p> <p>Following this outcome, EMMI immediately began work on the development of a methodology for EURIBOR that would rely on arm’s-length transactions whenever available, and other market data sources whenever necessary. The <i>hybrid</i> methodology was developed by EMMI with the input of a dedicated Task Force composed of market participants and independent experts.</p> <p>The hybrid methodology was successfully tested under live conditions during a period of three months in the summer of 2018. The final design and parameters of the methodology were set following two public consultations throughout 2018, and were approved by the EURIBOR Steering Committee and EMMI’s governing bodies for a phased implementation in 2019.</p>
<p><b>Criteria and procedures used to determine the benchmark:</b></p> <ul style="list-style-type: none"> <li>- description of the input data</li> <li>- priority given to different types of input data</li> <li>- minimum data needed to determine a benchmark</li> </ul>	<p>EURIBOR is grounded, to the extent possible, in euro money market transactions that reflect the Underlying Interest. To ensure robustness in the absence of transactions in the Underlying Interest, the <a href="#">Benchmark Determination Methodology for EURIBOR</a> (BDM) follows a hierarchical approach consisting of three levels. These levels should be employed progressively and in the order specified below:</p> <ul style="list-style-type: none"> <li>• Level 1 consists of contributions based solely on transactions in the Underlying Interest at the Defined</li> </ul>

<p>- use of any models or methods of extrapolation</p> <p>- any procedure for rebalancing the constituents of a benchmark's index</p> <p><b>BMR 27, 2(c)</b></p>	<p>Tenor from the prior TARGET day, using a formulaic approach provided by EMMI.</p> <ul style="list-style-type: none"> <li>• Level 2 consists of contributions based on transactions in the Underlying Interest across the money market maturity spectrum and from recent TARGET days, using a defined range of formulaic calculation techniques provided by EMMI. These consist of linear interpolation from adjacent tenors with a spread-adjustment, non-defined tenor transactions that are allocated to the nearest defined tenor using linear interpolation, and use of historical Level 1 contributions with a market adjustment.</li> <li>• Level 3 consists of contributions based on transactions in the Underlying Interest and/or other data from a range of markets closely related to the unsecured euro money market, using a combination of modelling techniques and/or the Panel Bank's judgment. Within Level 3 the hierarchy of data inputs is the following: data grounded in actual transactions, data based on executable quotes, indicative prices, rates or quotes with no firm commitment for execution, and data reliant primarily on the expert judgment of the Panel Bank.</li> </ul> <p>The calculation of EURIBOR on a given day requires that at least 12 out of the current 18 Panel Banks, from at least 3 different countries, have provided a contribution to the benchmark.</p> <p>The highest and lowest 15% of the final contribution rates of all Panel Banks are eliminated from the benchmark calculation. The remaining rates are arithmetically averaged and rounded to three decimal places following the symmetric arithmetic rounding convention "half away from zero". Each contribution rate carries the same weight in the calculation.</p> <p>For more information on the criteria and procedures used to calculate EURIBOR, please refer to the <a href="#">BDM</a> available on EMMI's website.</p>
<p><b>Procedures for the review and approval of the methodology</b></p> <p><b>BMR 27, 2(b)</b></p>	<p>EMMI performs an annual review of the EURIBOR methodology. This entails a data collection exercise, where Panel Banks are required to report all data in the unsecured segment of the euro money market. EMMI then analyses the effect of different changes to the design, features and parameters of the methodology on the final benchmark rate, with the objective of ensuring its robustness, reliability and representativeness in changing market circumstances.</p>

	<p>The EURIBOR Steering Committee makes the final recommendation for any change to the methodology. For changes that are deemed to be material by the Steering Committee, a public consultation of the proposed change follows. Ultimately any change to the methodology is approved by EMMI's governing bodies.</p> <p>For more information on the procedures for the review and approval of the methodology, please refer to the <a href="#">BDM</a> available on EMMI's website.</p>
<p><b>Procedures for dealing with errors in input data or in the determination of the benchmark, including when a re-determination of the benchmark is required</b></p> <p><b>BMR 27, 2 (f)</b></p>	<p>EMMI and the Panel Banks have in place a robust control framework to detect potential errors in the input data before the publication of EURIBOR. However, it remains possible that errors in the reporting of input data or in the determination of the benchmark may occur. Given the importance of EURIBOR in the financial system and the need for transparency in the daily determination of EURIBOR, EMMI has established an intraday re-fixing policy to address such potential errors.</p> <p>With the re-fixing policy, EMMI seeks to ensure the integrity and representativeness of EURIBOR, while minimising the impact on end-users. Therefore, there are limitations placed on the timing and materiality of the errors that may lead to a re-fixing:</p> <ul style="list-style-type: none"> <li>• Only errors reported before a cut-off time of 02:00 p.m. (CET) will be considered for a re-fixing;</li> <li>• Only errors that result in a change of 2 basis points or more in the final benchmark value for a particular tenor will be considered for a re-fixing;</li> </ul> <p>In the event of a re-fixing of EURIBOR, EMMI publishes an announcement on the EURIBOR Rates page of the EMMI website stating that a re-fixing is taking place. The publication of this announcement is to be made, at the latest, shortly after 02:00 p.m. (CET).</p> <p>In the event of a re-fixing, all authorised data vendors are notified of the re-fixing scenario at the latest shortly after 02:00 p.m. (CET).</p> <p>The publication of the re-fixed rate occurs no later than 03:00 (CET) via the usual publication channels. In addition, a list of effective EURIBOR re-fixing events (if any) are published in the dedicated re-fixing section of EMMI's website, along with</p>



	<p>disclosure of errors smaller than 2 bps or reported after 02:00 p.m. (CET), which did not result in a re-fixing.</p> <p>For more information on the procedures for errors and re-fixing, please refer to the <a href="#">EURIBOR Intraday Re-fixing Policy</a> available on EMMI's website.</p>
<p><b>How users will be informed of any delay in the publication of the benchmark or of any re-determination of the benchmark, and indicating the (expected) duration of measures to be inserted</b></p> <p><b>RTS 27, 1.4</b></p>	<p>EMMI relies on the authorised data vendors to disseminate the notifications of a delayed publication of EURIBOR or a re-fixing to the end users of the benchmark.</p> <p>In the event of a re-fixing of EURIBOR, the authorised data vendors receive the notice of a delayed publication or re-fixing directly from the EURIBOR calculation agent.</p> <p>EMMI also publishes an announcement on the EURIBOR Rates page of the EMMI website stating that a re-fixing is taking place</p>

## 5. EXERCISE OF JUDGEMENT OR DISCRETION BY THE ADMINISTRATOR OR CONTRIBUTORS

<p><b>Elements of the benchmark in relation to which discretion may be exercised and criteria applicable to the exercise of such discretion</b></p> <p><b>BMR 27, 1 (b)</b></p>	<p>EMMI does not exercise discretion in the determination of EURIBOR, neither does the calculation agent for EURIBOR.</p> <p>In order to ensure the robustness and resilience of EURIBOR in the absence of transactions, EMMI included the Level 3 (as described above) in the hybrid methodology. Panel Banks maintain discretion in the choice and design of their Level 3 methodologies, within the general guidance provided by EMMI.</p> <p>For the purpose of Level 3 contributions, Panel Banks are permitted to exclude individual transactions or classes of transactions from their calculations if such transactions can reasonably be considered to be conducted at rates that do not reflect the bank’s wholesale unsecured funding costs.</p> <p>While EMMI does not mandate Panel Banks to employ a particular model or type of analysis in using data from other markets closely related to the unsecured euro money market, each Panel Bank should reflect its own particular circumstances and business patterns, funding and liquidity management.</p> <p>For more information on the exercise of discretion, please refer to the <a href="#">Code of Obligations of Panel Banks</a> (COPB) and BDM available on EMMI’s website.</p>
<p><b>Position of the persons that can exercise discretion</b></p> <p><b>BMR 27, 1 (b)</b></p>	<p>EMMI does not exercise discretion in the determination of EURIBOR, neither does the calculation agent for EURIBOR.</p>
<p><b>Controls and rules that govern any exercise of judgement or discretion by the administrator or any contributors</b></p> <p><b>BMR 27, 2 (d)</b></p>	<p>The specific approach adopted by each Panel Bank for their contribution under Level 3 should be fully documented. The approach should be reviewed and approved at least annually by an independent Risk Management or equivalent function within the Panel Bank with sufficient expertise and market knowledge to render an informed judgment and recommendations, if any, for adjustment.</p> <p>EMMI reviews the documented Level 3 methodologies of each Panel Bank, and performs periodic surveys of the methodologies.</p> <p>As part of the daily contribution process, each Level 3 contribution made by a Panel Bank must be accompanied</p>

	<p>with a rationale explaining the data sources and discretion used in determining the Level 3 contribution.</p> <p>The internal oversight and verification procedures that Panel Banks must have in place should include a three level control model:</p> <ul style="list-style-type: none"> <li>• The internal function serving as the first level of control for the contribution of input data shall be responsible for carrying out the following duties: undertaking an effective check of input data prior to its contribution, checking that the submitter is authorised to contribute input data on behalf of the Panel Bank, and ensuring that access to contributions of input data is restricted to persons involved in the contribution process.</li> <li>• The internal function serving as the second level of control shall be responsible for carrying out the following duties: conducting a review of input data after its contribution, establishing and maintaining a whistle-blowing procedure, establishing and maintaining procedures for the internal reporting of any attempted or actual manipulation of the input data, establishing and maintaining internal reporting procedures for reporting any operational problems in the contribution process as soon as they arise, ensuring regular presence in person of a staff member from the second level control function in the office area where the front office function is based, maintaining oversight of relevant communications between front office function staff directly involved in contributing input data, and establishing, maintaining and operating a conflicts of interest policy.</li> </ul> <p>The internal function, independent from the first and second level control functions, serving as the third level of control, shall be responsible for performing checks, on a regular basis, on the controls exercised by the other two control functions.</p>
<p><b>Outline of each step of the process for any ex post evaluation of the use of discretion and position of any person(s) responsible for carrying out the evaluations</b></p> <p><b>RTS 27, 1.4</b></p>	<p>Panel Banks must have in place systems and controls including, among other things: pre-contribution checks to identify any suspicious input data, including checks in the form of a review of the data by a second person, and post-contribution checks to confirm that the input data has been contributed in accordance with the requirements of the <a href="#">COPB</a> and to identify any suspicious input data.</p> <p>The calculation agent for EURIBOR performs a number of pre- and post-publication checks on the contributions of Panel</p>

	<p>Banks, including a check of the rationale accompanying any Level 3 contributions. If necessary, the calculation agent follows up with the Panel Bank to ask for a confirmation of the contribution or to provide more information on the contributions. The post-publication checks are carried out by senior personnel within the calculation agent with relevant market experience.</p> <p>EMMI performs a monthly data integrity programme on the input data, contributions, and final benchmark values. The programme entails a number of statistical tests to uncover unusual patterns or trends in the data. Based on the results of the analysis, EMMI may conduct further follow up with the Panel Banks. The data integrity programme is executed by personnel within EMMI with the relevant skills and experience.</p>
--	---

## 6. CESSATION AND CHANGE OF THE METHODOLOGY

<p><b>Notice of the possibility that factors, including external factors beyond the control of the administrator, may necessitate changes to, or the cessation of, the benchmark</b></p> <p><b>BMR 27, 1(c)</b></p>	<p>In the event of a change, the complete discontinuation of EURIBOR, or the cessation of one or more of the EURIBOR benchmark tenors, consideration are given to these key elements of the change or cessation plan implementation: adequate advance notice; materiality of the change; interim arrangements; legal, regulatory, accounting and tax implications; infrastructure requirements; and role of the official sector and relevant stakeholders.</p> <p>EMMI engages stakeholders and end-users as early as possible in the form of a public consultation, in the event a change or the cessation of a EURIBOR tenor or the EURIBOR benchmark appears likely.</p> <p>The Steering Committee oversees, monitors and approves the implementation of proposed changes to EURIBOR. The final decision is taken by the EMMI governing bodies upon recommendation from the Steering Committee.</p> <p>For more information on procedures for public consultations or changes to the methodology, please refer to the <a href="#">Benchmarks Consultation Policy and Procedure</a> and the <a href="#">Benchmarks Changes and Cessation Policy</a>, available on EMMI's website.</p>
<p><b>Procedures for public consultation on any material changes to the methodology</b></p> <p><b>RTS 27, 1.4</b></p>	<p>The determination of the materiality of a change rests with the EURIBOR Steering Committee. A public consultation is undertaken for all material changes to EURIBOR. EMMI notifies identified stakeholders directly, and publishes notice of the consultation on its website inviting all impacted parties to provide feedback to the consultation. EMMI gives stakeholders adequate advance notice of the proposed change, and time period during which to provide feedback to the consultation.</p> <p>EMMI addresses feedback received from stakeholders in a published summary of responses. EMMI provides its rationale for the acceptance, modification or rejection of recommendations made by respondents to the consultation as part of this summary.</p> <p>For more information on procedures for public consultations or changes to the methodology, please refer to the <a href="#">Benchmarks Consultation Policy and Procedure</a> and the</p>

	<a href="#">Benchmarks Changes and Cessation Policy</a> , available on EMMI's website.
<p><b>Advice to the users that changes to, or the cessation of, the benchmark may have an impact upon the financial contracts and financial instruments that reference the benchmark or the measurement of the performance of investment funds.</b></p> <p><b>BMR 27, 1(d)</b></p>	<p>In the event of a change, the complete discontinuation of EURIBOR, or the cessation of one or more of the EURIBOR benchmark tenors, consideration are given to these key elements of the change or cessation plan implementation: adequate advance notice; materiality of the change; interim arrangements; legal, regulatory, accounting and tax implications; infrastructure requirements; and role of the official sector and relevant stakeholders.</p> <p>EMMI engages stakeholders and end-users as early as possible in the form of a public consultation, in the event a change or the cessation of a EURIBOR tenor or the EURIBOR benchmark appears likely.</p> <p>For more information on procedures for public consultations or changes to the methodology, please refer to the <a href="#">Benchmarks Consultation Policy and Procedure</a> and the <a href="#">Benchmarks Changes and Cessation Policy</a>, available on EMMI's website.</p> <p>EMMI advises users of EURIBOR to regularly assess that the benchmark used is appropriate, suitable and relevant for the targeted market and to put in place their own contingency provisions in the event any of the benchmarks are not available or in case of benchmark discontinuation.</p>

## 7. POTENTIAL LIMITATIONS OF THE BENCHMARK

<p><b>Identification of potential limitations of the benchmark, including its operation in illiquid or fragmented markets and the possible concentration of inputs</b></p> <p><b>BMR 27, 2(g)</b></p>	<p>The adverse effects of potential illiquidity within the unsecured euro money market are mitigated by the inclusion of Level 3 of the hybrid methodology (as described above), which ensures that each Panel Bank has a contribution rate for each tenor on each TARGET day. In a scenario whereby liquidity conditions in the euro money market tighten considerably, Panel Banks could face temporary difficulties in reliably determining their own cost of funds via their Level 3 methodologies.</p> <p>A potential fragmentation of the euro money market could reduce the quality of EURIBOR by increasing the dispersion of rates, hence leading to a higher rate volatility.</p> <p>As mentioned above, Level 3 of the hybrid methodology guarantees that each Panel Bank has a contribution rate for each tenor on each TARGET day. In this respect, the concentration risk is minimised, as all Panel Banks are required to submit a non-null contribution. In addition, EURIBOR is only calculated if at least 12 out of the current 18 Panel Banks contribute to EURIBOR on a given day, or if at least 3 countries are represented by the contributing banks. Finally, the contributions by each Panel Bank are weighted equally, there is no risk of concentration of inputs.</p>
<p><b>Definition of circumstances in which the market or economic reality measured by the benchmark may become unreliable</b></p> <p><b>RTS 27, 1.3</b></p>	<p>A contraction of liquidity in the unsecured euro money market during a market stress event could make the unsecured wholesale borrowing cost of credit institutions in EU and EFTA countries harder to measure. The immediate aftermath of the 2008 financial crisis is an example of such an event.</p> <p>A full and permanent shift in the wholesale funding of credit institutions from unsecured to primarily secured borrowing could also result in the underlying interest of EURIBOR becoming unreliable. Such a shift could result from differences in the regulatory treatment of unsecured versus secured funding for credit institutions, in addition to changes in the risk appetites of market participants.</p>
<p><b>Description of the circumstances in which the administrator would lack sufficient input data to</b></p>	<p>In a scenario whereby less than 12 out of the current 18 Panel Banks contribute to EURIBOR on a given day, or if fewer than 3 countries are represented by the contributing banks, EURIBOR will be calculated under the contingency method.</p>

<p><b>determine the benchmark in accordance with the methodology RTS 27, 1.3(a)</b></p>	<p>The contingency method consists of publishing the EURIBOR rates from the previous fixing day. The contingency method may only be used for 3 consecutive fixing days, during which the EURIBOR Steering Committee must devise a resolution strategy for preserving the continuity of EURIBOR.</p>
<p><b>Description of instances when the accuracy and reliability of the methodology used for determining the benchmark can no longer be ensured (such as when the administrator deems the liquidity in the underlying market as insufficient) RTS 27, 1.3(b)</b></p>	<p>Although Level 3 of the hybrid methodology ensures that each bank will have a contribution for each tenor on each TARGET day, a considerable tightening of liquidity in the euro money market could result in the Panel Banks facing temporary difficulties in reliably determining their cost of funds via their Level 3 methodologies. Even in such cases however, banks may still rely on other markets closely related to the unsecured euro money market for determining their Level 3 contributions.</p>
<p><b>Other information for users regarding the circumstances in which the measurement of the market or economic reality may become unreliable, including a description of what might constitute an exceptional market event RTS 27, 1.3(c)</b></p>	<p>An exceptional market event is an infrequent and unexpected occurrence, which has a significant impact on the broader market. Due to an exceptional market event, all activity in the underlying market could cease for instance. Such an event could result in unreliable EURIBOR contributions by the Panel Banks.</p>
<p><b>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 BMR 27, 2(e)</b></p>	<p>In case Panel Banks have no eligible transactions for Level 1 or Level 2 contributions, they will submit a Level 3 contribution (as detailed above).</p> <p>In a period of stress or a period where data sources may become unreliable, circumstances may lead to EURIBOR being calculated under the contingency method, whereby the EURIBOR rates from the previous fixing day are published. The contingency method may only be used for 3 consecutive fixing days, during which the EURIBOR Steering Committee must devise a resolution strategy for preserving the continuity of EURIBOR.</p>



## 8. SPECIFIC DISCLOSURES FOR INTEREST RATE AND CRITICAL BENCHMARKS

*EURIBOR is a critical interest rate benchmark and is therefore subject to the enhanced regulatory regime applicable to critical benchmarks (chapter 4 BMR) and to the additional regulatory regime under Annex I of BMR.*

Arrangements that have been put in place to comply with Annex 1 BMR RTS 27, 3	
<p><b>Accurate and sufficient data</b></p> <p><i>Priority of use of input data</i></p>	<p>The hybrid methodology for EURIBOR follows a hierarchical approach consisting of three levels. Level 1 and 2 are based on transactions in the Underlying Interest conducted by the Panel Bank. Within Level 3, the hierarchy of data inputs is as follows:</p> <ol style="list-style-type: none"> <li>1) Data grounded in actual transactions,</li> <li>2) Data based on executable quotes,</li> <li>3) Indicative prices, rates or quotes with no firm commitment for execution, and</li> <li>4) Data reliant primarily on the expert judgment of the Panel Bank.</li> </ol> <p>In addition to their own transactions in the underlying interest, Panel Banks may use data from markets closely related to the underlying interest, including: futures contracts referencing EURIBOR, forward Rate Agreements (FRAs), Fixed/Floating Interest Rate Swaps, and Basis Swaps referencing EURIBOR, overnight Index Swaps referencing the unsecured euro overnight interest rate or other short-term euro interest rates, and overnight and term securities financing transactions in euro.</p> <p>For more information on the priority of use of input data, please refer to the <a href="#">BDM</a> available on EMMI's website.</p>
<p><i>Adjustment of input data</i></p>	<p>Level 2.1 uses linear interpolation from the two adjacent tenors where there is a Level 1 contribution on a particular day. The linear interpolation is then submitted to a spread-adjustment reflecting the curvature of the EURIBOR curve.</p> <p>Level 2.2 uses transactions with a maturity falling on a non-defined tenor. These transactions are split into the two nearest tenors using linear interpolation.</p> <p>Level 2.3 uses historical Level 1 contributions from the previous 4 to 6 six days (depending on the tenor) and adjusts the historical contribution rate with a market adjustment</p>

	<p>factor derived from changes in the prices of three-month EURIBOR futures.</p> <p>In Level 3, EMMI permits the use of data from prior days, including a Panel Bank's prior contributions, provided that such data are appropriately adjusted to take account of market movements or changes in the Panel Bank's relative borrowing costs from the time of the original contribution to the current reference period.</p> <p>For more information on the adjustment of the input data, please refer to the <a href="#">BDM</a> available on EMMI's website.</p>
<p><b>Oversight function</b></p>	<p>EMMI has established and maintains a permanent and effective oversight function –EURIBOR Steering Committee – that exercises an independent oversight of all aspects of the provision of the EURIBOR including governance and methodological aspects.</p> <p>The procedures and governance arrangements related to the composition, duties and functioning of the Steering Committee are established in the EURIBOR Steering Committee Terms of Reference.</p> <p>Details of the membership of the Committee along with their biographies and declarations of interest, as well as minutes of the Committee meetings are available on EMMI's website.</p>
<p><b>Auditing</b></p>	<p>EMMI has in place internal reviews and audit arrangements to provide assurance on the effectiveness of the controls in place, taking into consideration EMMI's responsibility as benchmark administrator and its core processes and procedures.</p> <p>EMMI has appointed an independent external auditor to review and report on EMMI's compliance with EURIBOR's methodology and with BMR at least annually.</p> <p>Upon request of its competent authorities or any benchmark user, EMMI will publish the external audit reports.</p>
<p><b>Contributor systems and controls</b></p>	<p>EMMI has set uniform standards for EURIBOR Panel Banks (hereinafter, Panel Banks) with respect to their activities in contributing data for the provision of the benchmark. These standards are defined in the EURIBOR Code of Obligations of Panel Banks (<a href="#">COPB</a>).</p> <p>The primary objectives of the COPB are:</p>

	<ul style="list-style-type: none"><li>(i) to ensure the integrity of EURIBOR by setting baseline standards for the contribution of input data by Panel Banks;</li><li>(ii) to define specific obligations for Panel Banks with respect to governance, methodologies, control frameworks and independent review related to their contributions;</li><li>(iii) to assist Panel Banks establishing and maintaining a robust internal control environment in order to discharge their obligations with respect to EURIBOR; and</li><li>(iv) to provide transparency to stakeholders regarding the standards for the provision of EURIBOR.</li></ul> <p>Panel Banks are required to confirm compliance with the COPB to EMMI on an annual basis.</p> <p>An external audit of the input data of a Panel Bank, compliance with the COPB and BMR requirements for supervised Panel Banks must be carried out for the first time six months after the introduction of the COPB, and subsequently every two years.</p>
--	--

**ANNEX 1: KEY TERMS**

Term	Definition
<b>Approver</b>	Approvers are responsible for checking the contributions prior to contribution, except in those cases in which an automated process is in place, and overseeing the daily contribution process.
<b>BDM</b>	Benchmark Determination Methodology for EURIBOR. The document outlining the Hybrid Methodology for EURIBOR.
<b>BMR</b>	Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.
<b>Calculation Agent</b>	A legal entity with delegated responsibility for determining a Benchmark through the application of a formula or other method of calculating the information or expressions of opinions provided for that purpose, in accordance with the Methodology set out by the Administrator (IOSCO Definition).
<b>Contribution rate</b>	The final rate of each Panel Bank used in the calculation of EURIBOR.
<b>Contributor</b>	A natural or legal person contributing input data - Panel Banks (BMR definition).
<b>COPB</b>	EURIBOR Code of Obligations of Panel Banks. The document detailing the responsibilities of the individual Panel Banks that contribute to EURIBOR.
<b>Data Integrity Programme</b>	A monthly programme that monitors the integrity and representativeness of the EURIBOR benchmark and provides EMMI and the EURIBOR Steering Committee with quantitative grounding to assess whether changes are necessary to the EURIBOR methodology or calculation process.
<b>Data Vendors</b>	Authorised companies or other organisations that receive the published EURIBOR rates directly from EMMI and distribute them to subscribers.
<b>EURIBOR</b>	The rate at which wholesale funds in euro could be obtained by credit institutions in the EU and EFTA countries in the unsecured money market.
<b>EURIBOR Governance Framework</b>	(a) the EURIBOR Governance Code of Conduct; (b) the EURIBOR Code of Obligations of Panel Banks; (c) the EURIBOR Code of Obligations of the Calculation Agent; and (d) the EURIBOR Benchmark Determination Methodology.
<b>EURIBOR Steering Committee</b>	The independent oversight body charged with the oversight of all aspects of the provision of EURIBOR, including those concerning its governance and methodology.

<b>Front Office Function</b>	Any department, division, group, or personnel of contributors or any of its affiliates that performs any pricing, trading, sales, marketing, advertising, solicitation, structuring, or brokerage activities (BMR).
<b>GCC</b>	EURIBOR Governance Code of Conduct. The document specifying the governance and control arrangements of EMMI, as the administrator of EURIBOR, to ensure the integrity and reliability of EURIBOR.
<b>Input Data</b>	The data in respect of the value of one or more underlying assets, or prices, including estimated prices, quotes, committed quotes or other values, used by an administrator to determine a benchmark (BMR).
<b>MMSR</b>	The ECB's Money Market Statistical Reporting dataset.
<b>Panel Bank</b>	A credit institution <sup>4</sup> located in EU and EFTA countries that is a member of the EURIBOR panel and contributes input data on a daily basis for the determination of the EURIBOR benchmark.
<b>Submission</b>	Input data transmitted by a panel bank and used for the contribution rate.
<b>Submitter</b>	A natural person employed by the contributor for the purpose of contributing input data.
<b>Subscriber</b>	A person or entity that purchases Benchmark determination services from an Administrator.
<b>TARGET</b>	Trans-European Automated Real-time Gross settlement Express Transfer System. Throughout the EURIBOR Governance Framework, references to "TARGET" should be read with respect to the euro system's TARGET2 real-time gross settlement system.
<b>TARGET Day</b>	Any day on which the Trans-European Automated Real-Time Gross Settlement Express Transfer is open.

<sup>4</sup> For this purpose "credit institution" has the meaning as specified in Article 4(1)(1) of Regulation (EU) No. 575/2013, an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account.

## **ANNEX 2: REFERENCE DOCUMENTS**

The EURIBOR Benchmark Statement should be read in conjunction with the EURIBOR Governance Framework, methodology and policy documents which are available on EMMI's website and listed below:

[EURIBOR Governance Code of Conduct](#)

[EURIBOR Steering Committee Terms of Reference](#)

[EURIBOR Benchmark Determination Methodology](#)

[EURIBOR Intraday Refixing Policy](#)

[Benchmarks Changes and Cessation Policy](#)

[EURIBOR Code of Obligations of Panel Banks](#)

[Data Transmission and Validation under the Hybrid EURIBOR Methodology](#)

[EURIBOR Code of Obligations of the Calculation Agent](#)

[EMMI Conflict of Interests Policy](#)

[EMMI Consultation Policy](#)

[Complaints Policy](#)

[Whistleblowing Policy](#)

[Record-keeping Policy and Procedure for EMMI Benchmarks](#)