Euribor

THE PATH FORWARD TO TRANSACTION-BASED EURIBOR

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European Money Markets Institute
56, Avenue des Arts 1000 Brussels | +32 (0) 2 431 52 08 | info@emmi-benchmarks.eu

Euribor EMMI

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1 INTRODUCTION

Euribor is a major euro interest reference rate, administered by the European Money Markets Institute (EMMI). In light of its wide use in the global financial system as a benchmark for a large volume and broad range of financial products and contracts, Euribor is commonly regarded as a critical benchmark of systemic importance for financial stability. Accordingly, EMMI is strongly committed to maintaining a robust governance and control framework for the administration of the Euribor benchmark, meeting global regulatory expectations and best practices.

Over the past three years, EMMI has made significant progress towards enhancing the transparency, governance and control framework of the Euribor benchmark rate-setting process. Nonetheless, the current Euribor methodology remains based on collecting quotes from contributing banks and the use of expert judgment.

On 22 July 2014, the Financial Stability Board (FSB) published its report Reforming Major Interest Rate Benchmarks. In line with the IOSCO Principles for Financial Benchmarks, the FSB report recommends to strengthen "IBORs and other potential reference rates based on unsecured funding costs by underpinning them to the greatest extent possible with transactions data (IBOR+)"[1]. To this end, the report acknowledges that "the administrators may have to consider a wide set of methodological changes to or clarification of what the benchmark is intended to represent." Indeed, to comply with regulatory guidance, financial benchmarks, including Euribor, should be anchored in actual transactions in order to improve transparency and reduce any risks of manipulation.

In this context, EMMI believes that the overhaul of Euribor's determination methodology towards a fully transaction-based benchmark will ensure the highest degree of compliance with regulatory recommendations put forward by the Financial Stability Board (FSB), IOSCO, ESMA-EBA and defined in the forthcoming European Regulation on Indices Used as Benchmarks in Financial Instruments and Financial Contracts. Also, evolving to a transaction-based benchmark will ensure Euribor stays fully representative of the market conditions and result in a more robust and transparent benchmark is essential for the integrity of financial markets and in line with market, regulatory and consumer expectations.

As an indispensable element of this reform process, on 30 October 2015, EMMI published its Consultative Position Paper on the Evolution of Euribor (the "October 2015 Consultative Paper" or "Paper")[2]. The paper summarized EMMI's plans for the reform of the benchmark's determination methodology towards a transaction-based Euribor as well as EMMI's plan for the implementation of the transaction-based determination methodology. It further provided EMMI's rationale and timeline to conduct a *seamless transition*[3] (as described in the FSB report, [MPG14, pages 13f]) under which Euribor remains the same benchmark while the determination methodology is adjusted. Following the FSB Report published in July 2014, a *seamless transition* is the least disruptive transition path to the extent that the IBOR+ is close to the legacy IBOR fixing in value, definition, or volatility. Stakeholders were invited to provide their feedback to the consultative position paper by 30 January 2016.

[1] The FSB recommends "strengthening existing IBORs and other potential reference rates based on unsecured bank funding costs by underpinning them to the greatest extent possible with transactions data" (these enhanced rates are addressed as "IBOR+"). See [FSB14, page 2].

[2] http://www.emmi-benchmarks.eu/euribor-org/euribor-evolution.html

[3] The Report refers to four different types of transitions. While under the "*seamless transition*" the benchmark is retained by merely adapting the underlying methodology, the other transition paths imply the launch of a new benchmark which then replaces the legacy IBOR.

Moreover, the written public consultation was accompanied by a series of national roundtable meetings in key constituencies of Euribor, namely in Finland, Portugal, Germany, the United States, France, Spain, Italy, the United Kingdom, and Brussels – for stakeholders from the BeNeLux countries.

By and large, EMMI found broad support for its arguments and plans to further reform the Euribor benchmark. While many of the comments summarized in EMMI's Summary of the Stakeholder Feedback[4] were also raised during the national meetings, stakeholders were generally supportive of EMMI's proposal for the overall design of a transaction-based determination methodology and its transition strategy. Stakeholders have clearly understood that EMMI's planned adjustments to Euribor's determination methodology stem from new regulatory requirements and recommendations and that failing to conduct the necessary modifications to further anchor the Euribor benchmark in transactions would severely threaten its viability.

As mentioned in the Consultative Position Paper on the Evolution of Euribor, the Euribor+ Project was organized across five inter-connected workstreams addressing the following topics: (1) Benchmark Framework, (2) Transaction-based Methodology, (3) Infrastructure, (4) Transition Execution, (5) Communication Program.

This paper sets out EMMI's path forward on the evolution of Euribor from the current quote-based determination methodology to a fully transaction-based methodology based on the feedback to the October 2015 Consultative Paper, providing with a timeline for the deliverables respective to each workstream.

EMMI has been assessing all feedback received throughout the consultation process and would like to present a brief update on the progress done or to be done in the above-mentioned workstreams.

2 BENCHMARK FRAMEWORK

EMMI is closely monitoring the upcoming regulatory requirements in order to review the Code of Conduct in line with these. As presented in the Consultative Position Paper, EMMI is aware that the Euribor specification may reflect some shortcomings. Aiming to resolve these shortcomings, EMMI will further clarify the Euribor specification by distinguishing the Underlying Interest (i.e. what the benchmark seeks to measure), this is the rate at which banks of sound financial standing could borrow funds in the EU and EFTA countries in the wholesale, unsecured money markets in euro from the Determination methodology (i.e. how this economic reality should be measured).

These clarifications of the Euribor specification will be included in the revised Code of Conduct. In addition, the revised Code of Conduct will set up clear guidelines with regards to the methodology and eligible input data to make the Euribor benchmark determination, as well as on the reporting scheme for contributing banks.

3 TRANSACTION-BASED METHODOLOGY FOR EURIBOR

3.1 INPUT DATA

As defined in the Underlying Interest component of the Euribor specification, Euribor seeks to represent the cost at which banks of sound financial standing could borrow funds in the wholesale unsecured euro money markets.

[4] http://www.emmi-benchmarks.eu/euribor-org/euribor-evolution.html

As described in Section 4, EMMI will determine each Panel Bank's contribution upon reception of their daily "raw" transactional data in a format similar to that used by the European Central Bank as part of the Money Market Statistical Reporting (MMSR) Regulation.[5]

The following are the filters that will be considered by EMMI to determine which unsecured wholesale borrowing transactions should be selected for inclusion in the Euribor rate submission determination process. Transactions that remain after these filters have been applied to a Panel Bank's universe of transactions will be those selected by EMMI for the individual Panel Bank's Euribor rate submission calculation.

		Description
1	Eligible currency denomination	Only transactions directly denominated in euro will be regarded as eligible.[6]
2	Timing of eligible transactions	In order to ensure that all Panel Banks select transactions for the same daily timeframe, only transactions executed on TARGET[7] day T are eligible for a Euribor rate submission on TARGET day T+1.
3	Eligible types and counterparties	Given the Underlying Interest that the Euribor benchmark seeks to represent, only transactions conducted in the wholesale unsecured money markets and based on the following types of unsecured borrowing are eligible: • Unsecured cash deposits attracted from the following counterparties[8], irrespective of their geographic location: o Deposit-Taking Corporations, except those of the Central Bank subsector; o Money market funds (MMFs); o Non-MMF investment funds; o Other Financial Institutions; o Official Sector Institutions; o Non-financial corporations that are not categorized as small business customers in the Basel III LCR regulations (only unsecured wholesale funding providing by customers that qualify as non-financial corporates according to the ECB's MMSR reporting instructions should be considered); o Insurance Corporations; and o Pension Funds. • Short-term securities (i.e. CPs, ECPs, CDs, ECDs, and others) irrespective of the type and location of the counterparty.

[5] See the MMSR Regulation ECB/2014/48 under http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R1333 and https://www.ecb.europa.eu/stats/money/mmss/html/index.en.html

[6] Funding transactions involving FX swaps will not be included for the moment.

[7] TARGET stands for Trans-European Automated Real-time Gross settlement Express Transfer System. The Eurosystem maintains TARGET2, which is the second generation of TARGET and is a real-time gross settlement system. Throughout this document, references to "TARGET" should be read with respect to the Eurosystem's TARGET2 system.

[8] These counterparties largely align with the counterparty sector categorized outlined in the ECB's MMSR reporting instructions. These reporting instructions use the definitions of institutional sectors defined by the revised European System of Accounts (ESA 2010) developed by the European Union's Eurostat group.

		Description
		The blueprint of the transaction-based methodology published in the Position Paper did not envisage transactions conducted at a floating-rate as eligible toward the calculation of the benchmark. EMMI will collect data on such instruments as part of the Pre-Live Verification Program in order to evaluate their possible incorporation into the benchmark calculation. Deposits or securities with embedded options should not be included for selection in the Euribor submission rate determination process. The eligible transaction counterparties above have been selected for their representation of the primary funding sources in the wholesale money markets.
4	Eligible settlement dates	For all eligible transactions, the standard value date window for each TARGET day is T, T+1, and T+2.
5	Eligible tenors and maturity dates windows	The Position Paper indicates that after the implementation of the transaction-based methodology, the Euribor benchmark will be calculated for the following five tenors: 1 week, 1 month, 3 months, 6 months, and 12 months. During the Program, EMMI will perform a data sufficiency analysis to all current Euribor tenors (and, in particular, the 2 month tenor) to assess any possible shift in liquidity that justifies any change in EMMI's original intention. Maturity dates windows will be reviewed on the basis of this analysis.

Intra-group transactions must be excluded from the scope of reporting. Specifically, transactions between EU and EFTA branches, including EU and EFTA subsidiaries, associated with the respective participating bank should not be reported.

Further analysis will be conducted as a part of the Pre-Live Verification Program to determine whether inclusion of non-financial corporate transactions should be subject to qualifying criteria (geography, tenor, or transaction size).

3.2 CORE METHODOLOGY

The core methodology as designed within the Euribor+ Task Force was approved by EMMI's governance bodies (Euribor Steering Committee, EMMI Board of Directors and EMMI General Assembly) in May 2016. However, it must be stressed that certain methodological parameters will be re-assessed in the context of the Pre-Live Verification Exercise (see Section 3.5).

As described in Section 4, the Euribor Panel Banks will transmit "raw" transactional data on a daily basis through a centralized facility established by EMMI. Upon reception, performance of the necessary data quality checks, and appropriate filtering, and bucketing per active tenors, EMMI will be responsible for calculating the Panel Banks daily Euribor submission for each active Euribor tenor. An individual Panel Bank's contribution toward the index will consist of two elements, per tenor:

Reported Data Elements	Description
Rate	The submission rate is the volume-weighted average rate (VWAR) of the set of eligible transactions. It is calculated as $$\text{Submission Rate} = \frac{\sum_i (r_i \times \text{Vol}_i)}{\sum_i \text{Vol}_i}$$ where r_i and Vol_i are the borrowing rate and nominal size of the eligible transaction *i*, respectively. The weighted sum is then divided by the sum of all transaction volume in the defined set of eligible transactions for the trade date, indexed by *i*. Submitted rates will be rounded to three decimal places.
Transaction Volume	The sum of notional amounts of all eligible transactions which were used to derive the submission rate.[9] Transaction volumes will be rounded to the nearest euro.

It is important to underline that in the event that on a given day a contributing bank has no eligible transactions recorded for a given tenor, it will transmit a no-transactions indicator to be defined. This is, contributing banks will only be required to report eligible transactions without carrying out any discretion or expert judgement whatsoever.

The first step of the core methodology consists of the determination of the full and final dataset of submission rates across each tenor. The core calculation methodology of the transaction-based Euribor is designed to ensure daily data sufficiency and mitigate the volatility, while still relying on real transactions and remaining representative of the market. To this end, the methodology uses, when needed, the Panel Banks' transactional data from previous days in a technique referred to as *gap-filling* (see Sections 3.4.1 and 3.4.3 in the Position Paper for a full description of the *gap-filling technique*).

> The initial parametrization of the number of days the methodology looks back in search of the most recent volume-weighted average rate, based on 2012/13 data, was set at 4 TARGET days, for the 1 week, 1 month, 3 month, and 6 month tenors, and at 6 TARGET days for the 12 month tenor. **EMMI will carefully reassess the gap-filling parameters under the current market conditions as part of the Pre-Live Verification Program**.

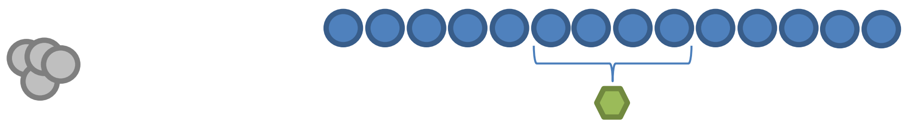
[9] With no minimum threshold set either for individual transactions or aggregated volumes.

Secondly the Euribor rate is obtained from the resulting dataset by means of a *median group calculation*, relying on the submissions of a range of banks (see Sections 3.4.2 and 3.4.3 in the Position Paper for the definition of the *median group*).

Gap-filling example. The following table exhibits the application of **4 day *gap-filling*** to a hypothetical panel of 6 banks contributing to the calculation of Euribor on day T+1 (publication day). Banks A, B, and D did have transactions on day T. We observe that while Banks C and E did not have transactions reported on TARGET day T, the gap-filling methodology exploited their data from days T-1 and T-4, respectively, toward the computation of the benchmark. Bank F, however, is excluded due to lack of transactions before the cut-off date and not considered for the determination of the benchmark.

		Panel bank contributors						
		Bank A	Bank B	Bank C	Bank D	Bank E	Bank F	
Days	T	X	X		X			
	T-1	X	X	X	X			
	T-2		X	X	X			
	T-3		X	X	X			
	T-4	X	X		X	X		Cut-off date
	T-5		X	X		X	X	

Euribor calculation example. On day T and for the 3-month tenor, a hypothetical Panel of 18 banks submit their contributions (rate and transaction volume) toward Euribor. Four banks have no transactions to report on day T, nor did they transact in the previous 4 days, and are therefore excluded from the calculation. The rate submissions from the remaining 14 Panel Banks are ordered from lowest to highest. Euribor is obtained as the average of the **four** central rates in that ordered list.



Panel banks with non-zero transaction volume, either on day T or after appropriate gap-filling.

Panel banks with zero transaction volume on day T and after applying gap-filling rules.

Euribor – obtained as the simple average of the **four** submissions in the median group, for the number of submissions to be an even number (14).

Schematic representation of the Euribor calculation example

3.3 TIER 1 FALLBACK ARRANGEMENTS

3.3.1 How will Tier 1 be triggered?

As explained in the Position Paper (Section 3.4.4), thresholds for minimum daily volume and minimum number of contributors will be established by EMMI so that if on a given day and tenor, either the aggregate daily transaction volume reported by Panel Banks or the number of Panel Banks contributing to the calculation of the Euribor index are below the set thresholds, **Tier 1 Contingency** is triggered.[10]

The aggregate daily volume threshold and the Panel Bank contributor threshold (only the reporting of non-zero transaction volumes is considered as a contribution for the purposes of this threshold) **will be established after the analysis of the data received by EMMI during the Pre-Live Verification Program**, and possibly other collected market data, including short term paper and publicly available market data sources.

3.3.2 How will Euribor be determined under Tier 1?

Under Tier 1 circumstances, Euribor will be determined as a volume-weighted average that incorporates volume and rates submitted on the preceding days of the contingency period to increase volume sufficiency while maintaining a view of current market conditions.

Given that $\bar{v}_T$ is the raw volume (no-gap filling) on day T; v_T is the gap-filled volume on day T; $\bar{r}_T$ is the rate calculated using only non-zero volume contributions on day T (i.e. median group without gap-filling); r_T is the rate based on the standard methodology on day T (i.e. median group with gap-filling); and R_T is the final published rate on day T.

If the Tier 1 fallback arrangement is triggered, this arrangement relies on the following formula on the first day of contingency:

$$R_1 = \frac{v_0 r_0 + \bar{v}_1 \bar{r}_1}{v_0 + \bar{v}_1}, \text{ where } r_0 = R_0.$$

In such a scenario, note that as the ordinary volume on Day 1 ($\bar{v}_1$) approaches 0, the calculated rate (R_1) approaches the previous day's rate based on standard (gap-filled) methodology (r_0=R_0). This mitigates concerns of volatility that may arise by simply extending the gap-filling period.
In the case of need, with the notation above, derived formulas for contingency arrangements on consecutive days are as follows:

Day 1 Contingency	Day 2 Contingency	Day 3 Contingency	Day 4 Contingency
$R_1 = \frac{v_0 r_0 + \bar{v}_1 \bar{r}_1}{v_0 + \bar{v}_1}$	$R_2 = \frac{(v_0 + \bar{v}_1) R_1 + \bar{v}_2 \bar{r}_2}{v_0 + \bar{v}_1 + \bar{v}_2}$	$R_3 = \frac{(v_0 + \bar{v}_1 + \bar{v}_2) R_2 + \bar{v}_3 \bar{r}_3}{v_0 + \bar{v}_1 + \bar{v}_2 + \bar{v}_3}$	…

[10] Note that the comparison of aggregated daily volume and number of contributors with the thresholds above is to be performed **after gap-filling**.

It should be noted that such formulaic approach relies on data already provided by the contributing banks and requires no additional data submissions. Furthermore, the fallback determination takes place in the same timeframe as the normal determination method.

3.4 TIER 2 FALLBACK ARRANGEMENTS

3.4.1 How will Tier 2 be triggered?

Tier 1 contingency arrangements should last for a maximum of 10 consecutive TARGET days, within which time the Euribor Steering Committee should be convened to determine further contingency measures if a return to normal conditions appears unlikely. The Steering Committee should decide on further contingency arrangements, including the extension of the formulaic determination approach and invocation of a Tier 2 fallback arrangement if a return to normal conditions appears unlikely.

3.4.2 How will Euribor be determined under Tier 2?

Based on the recommendations of the Euribor+ Task Force, **EMMI will take direct responsibility for determining the benchmark under Tier 2 contingency circumstances**. In order to carry out this responsibility, EMMI will rely on a number of data sources, including:

- Continued submission of eligible transaction data by Panel Banks, to the extent that such transactions continue to occur;
- Submission of verifiable data by Panel Banks regarding transactions, executable quoted rates or aggregated rates derived from such auditable sources; and
- Public, Euribor-related data from regulated markets and trading venues, including but not limited to Euribor futures markets.

EMMI will determine the most useful classes of verifiable information to be sought from Panel Banks. EMMI will issue reporting instructions, including data standards, to the Panel Banks when this analysis has been concluded. Guidelines framing the sources derived from the Panel Banks will be included in the revised Euribor Code of Conduct.

Since there is a range of circumstances that may give rise to a Tier 2 contingency, ranging from a simple lack of eligible transaction data for a sustained period to a full-blown market crises, EMMI cannot predict with certainty which of the above data may be available in a given contingency to permit the continued determination of the benchmark. This has two implications:

- Firstly, EMMI will wish to have available a range of data sources as wide as possible, so that whatever data is available can inform the benchmark determination.
- Secondly, EMMI will need a variety of determination methods in order to combine and assess the data to derive the benchmark rates. EMMI is currently evaluating such methods and will publish the broad conclusions of this analysis in due course.

3.5 PRE-LIVE VERIFICATION PROGRAM

The October 2015 Consultative Paper included a **preliminary assessment of the rate level and volatility characteristics** of Euribor determined using the proposed transaction-based methodology. However, the data for this assessment covered the period 2012/13 and, as such, it was acknowledged that **these estimates are most likely not reflective of current market conditions**. The project timeline presented in the October 2015 Consultative Paper envisaged the performance of a three-month "**pre-live assessment**," prior to the planned switch-over to the new transaction-based determination methodology, to ensure that the estimated magnitude of the impact on rate and volatility calculated with 2016 data is comparable to the information published in the Paper. In light of the feedback obtained in response to the Paper and aware of its importance, **EMMI has reassessed the length of the pre-live assessment**: the Pre-Live Verification Program (or the "Program") will cover a **six-month period starting in September 2016.**

The Program has four objectives:

i. The main purpose of EMMI's Pre-Live Verification Program in the context of the evolution of Euribor to a transaction-based methodology is to **provide EMMI with a more current understanding** of the impact of the new determination methodology on Euribor's rate levels and volatility. As a consequence of this assessment, EMMI will be better able to **decide whether it is appropriate to proceed** with the implementation of the transaction-based methodology in the context of a *seamless transition*.

ii. The proposed methodology for the transaction-based benchmark was developed using data ranging from January 2012 through August 2013. Market conditions in the euro area during that period were noticeably different from those prevailing in the current environment (e.g. credit conditions have eased substantially compared to 2012/13 levels – both in the financial and non-financial sectors; long-term liquidity has increased significantly as a result of the ECB's expanded asset purchase programs and the targeted long-term refinancing operations (TLTROs); interest rates have moved into negative territory.) The data submitted by participating financial institutions as part of the Pre-Live Verification Program will give EMMI the opportunity to make an initial setting, in preparation for the launch, of certain methodology parameters (e.g. contingency thresholds below which fallback arrangements will be invoked).

iii. The Pre-Live Verification Program also includes, as a subsidiary objective, **the testing of the contribution and calculation infrastructures**, developed in the context of the Euribor+ Project, prior to the final switch-over to the new methodology.

iv. At the conclusion of the Pre-Live Verification Program, EMMI will prepare a report summarizing the results and conclusions of the Pre-Live Verification Program. This report will be reviewed by EMMI's Governing Bodies, as well as official sector stakeholders, prior to publication. It is intended to inform authorities and the markets of the results of the Pre-Live Verification Program and provide EMMI's rationale for deciding whether to continue with the evolution to the transaction-based benchmark methodology on *the seamless transition* path.

A description and purpose of the Program, a detailed timeline, the governance of the Program, the role of the banks participating in the exercise, and the data analyses that will be performed during the Pre-Live Verification Program are discussed on EMMI's <u>Pre-Live Verification Program Guidelines</u>.

However, EMMI would like to stress that unless a large number of banks active in the euro money markets participate in the Pre-Live Verification Program (i.e. approximately 40 banks), a successful outcome of the exercise may not be achieved.

4 CONTRIBUTION MODEL FOR TRANSACTION-BASED EURIBOR

In its October 2015 Consultative Paper, EMMI envisaged a contribution model for Panel Banks towards the calculation of a transaction-based Euribor, in which banks would submit, for each day and Euribor tenor, a volume-weighted average rate and aggregate transaction volume (traditional "aggregates model"). A number of respondents to the Consultative Position Paper encouraged EMMI to assess the possibility of Panel Banks contributing instead "raw" transactional data in a format similar to that used by the European Central Bank as part of the Money Market Statistical Reporting (MMSR) Regulation.[11]

In response to this request, EMMI conducted a high-level assessment of Panel Bank obligations with respect to operational control requirements under a transaction-based Euribor and the respective two contribution models above: the traditional "aggregates" model vs. the "raw data" model. To this end, EMMI gathered feedback from panel banks on their preferred contribution model (i.e. submitting a volume weighted average and underlying total volume for each tenor vs submitting transactional raw data in the MMSR XML format). An overwhelming majority of the panel banks supported the contribution of raw data to an EMMI centralised platform as this would alleviate panel banks' burdens on the daily benchmark determination process while remaining responsible for the quality of the contributed raw data.

EMMI's Governing Bodies (i.e. Euribor Steering Committee, EMMI Board of Directors and EMMI General Assembly) approved the following submission model for transaction-based Euribor:

As part of their obligations as Euribor Panel Banks, **banks will transmit "raw" transactional data** on a daily basis through a centralized facility established by EMMI for this purpose. At its core, the transmission will consist of transaction-by-transaction data regarding wholesale unsecured euro money market transactions executed by the Panel Bank on each TARGET date. The specified reporting framework, the Euribor Transaction Data Reporting (E+TDR) framework, will include the messaging framework, reporting (message) schemas, variables and domains for variables for use by Panel Banks. **EMMI has chosen to emulate, where feasible, the European Central Bank's (ECB) framework for the MMSR**, as the basis for the E+TDR framework. This approach seeks **to minimize the data submission burden on Panel Banks** who also participate in the MMSR program. Panel Banks will be able to submit transaction data to EMMI in MMSR format, with only some minor adjustments. It should be noted however, that all Panel Banks should use the E+TDR framework, regardless of whether they participate in the MMSR program or not.

Panel Banks must ensure the verifiability and appropriateness of their submissions and, as such, must establish an **internal control framework** designed to ensure adherence to the contribution quality requirements outlined in the *Euribor Reporting Instructions* (ERIS) for Panel Banks.

EMMI believes that this model is the most appropriate way forward in order to gain support from prospective banks, in particular those participating to the MMSR Regulation which can leverage their reporting scheme. In this context, EMMI expects to enlarge the current Euribor Panel, which is one of the greatest challenges in the transition to a transaction-based benchmark.

[11] See the MMSR Regulation ECB/2014/48 under http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014R1333 and https://www.ecb.europa.eu/stats/money/mmss/html/index.en.html

5 TRANSITION

As described in detail in the Consultative Position Paper on the Evolution of Euribor, EMMI intends to pursue the *seamless transition* path provided that the outcome of the Pre-Live Verification exercise is positive. This transition path outlined in the FSB Report as the least complex, implies that the benchmark will therefore continue to be termed “Euribor” and the benchmark rates will continue to be published on the data vendor pages as currently. EMMI is aware of the legal and operational issues that could arise from the transition. In this context, EMMI created a Legal Working Group to assess legal aspects derived from the transition to a transaction-based Euribor. As part of its deliverables, EMMI in conjunction with the Legal Working Group will publish a report with the main findings of the legal aspects assessed.

6 COMMUNICATION

EMMI is aware of the importance of having a sufficient number of contributing banks, not only for the launch of the transaction-based methodology for Euribor in 2017, but also for the purposes of the Pre-Live Verification Program to start in September 2016. As such, as part of its communication efforts, EMMI has started a solicitation process seeking to have approximately 40 banks active in the euro money markets participating to the pre-live verification exercise.

Furthermore, EMMI has also developed a stakeholder outreach program to continue engaging with stakeholders and public authorities to ensure continued support for the proposed transition towards a transaction-based Euribor. To this end, after the Pre-Live Verification Program, EMMI will most likely hold stakeholder workshops to seek feedback from associations representing the stakeholder community to understand what spread would be considered within tolerance levels.

7 UPDATED TIMELINE

A more detailed timeline for the Pre-Live Verification Program can be found on the Pre-Live Verification Program Guidelines published by EMMI on June 2016, and available on its website.

Subject to a positive outcome of the Pre-Live Verification Program, EMMI envisages the evolution of Euribor to a transaction-based methodology during Q2 2017. An updated timeline including further information on the respective workstreams of the project is shown below.