

Recommendations by the working group on euro risk-free rates

on EURIBOR fallback trigger events and €STR-based EURIBOR fallback rates

1 Background

Since its inception in 2018, the working group on euro risk-free rates (hereinafter the "working group") has been working extensively to identify best practices for contract robustness in contracts and financial instruments referencing EURIBOR. Although EURIBOR is not scheduled to be discontinued, the development of more robust fallback language addressing the permanent discontinuation of EURIBOR can help to enhance legal certainty and reduce the risks stemming from the worst-case scenario and, at the same time, comply with the EU Benchmark Regulation (BMR)¹, when applicable.

On 23 November 2020, the working group launched two public consultations seeking feedback on EURIBOR fallback trigger events and on €STR-based EURIBOR fallback rates.

Detailed summaries of the market responses to the public consultations were published on 15 February 2021:

- a) Summary of responses to the public consultation by the working group on euro risk-free rates on EURIBOR fallback trigger events
- b) Summary of responses to the public consultation by the working group on euro risk-free rates on €STR-based EURIBOR fallback rates

For a comprehensive reading, the working group recommends that market participants analyse the recommendations and explanations included in this document in conjunction with the public consultations and the market responses on which they are based.

To provide a recommendation, the working group requires a minimum of two-thirds of responses to be in favour of any of the proposed solutions. In all other cases, the working group only provides guidance and explains possible alternatives that market participants could consider.

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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, OJ L 171, 29.6.2016, p.1.

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This paper discusses a variety of options relating to the introduction of fallback trigger events and fallback rates for contracts and financial instruments referencing EURIBOR. Recipients of this recommendation are responsible for making their own assessments as to the suitability of the various options discussed herein. Recipients must continue to operate in an independent and competitive manner and they should not use the content of this document to coordinate their activities in breach of applicable law.

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2 Consistency between asset classes and risk management considerations

Market participants should, to the extent possible, aim for consistency in relation to fallback provisions across all asset classes and related contracts, including cash products and derivatives, in order to deal with transfer value and basis risks. In October 2019 the working group published a report highlighting the risk management implications of incorporating different fallback language for different asset classes.²

Through the analysis from a risk management perspective included in this report, the working group highlights possible risk management implications of (i) having timing inconsistencies in fallback provisions triggers, and (ii) incorporating different fallback trigger language for different asset classes. Additionally, market participants should try to reduce the variability of fallback rates between different product classes (including derivatives) to a minimum, but it is ultimately up to the parties involved to resolve this matter, taking account of their individual circumstances. In particular, risk management side effects could arise from the lack of consistent language for the usual hedging product combinations. Market participants are recommended to consider these risks when developing fallback provisions.

The abovementioned report sets out other operational, IT system, data and additional risk management implications, which market participants are recommended to consider when developing €STR-based fallback rates for contracts and financial instruments referencing EURIBOR.

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Report by the working group on euro risk-free rates on the risk management implications of the transition from EONIA to the €STR and the introduction of €STR-based fallbacks for EURIBOR, ECB, October 2019.

3 Recommendations on EURIBOR fallback trigger events

3.1 General recommendations

- Contracts and financial instruments³ referencing EURIBOR should include provisions covering trigger events related to permanent cessation, temporary non-availability⁴ and non-representativeness (pre-cessation).
- Trigger events should be objectively drafted in precise terms and refer to events made publicly available by the regulatory supervisor of the EURIBOR administrator or the EURIBOR administrator.
- 3. The date from which the fallback rate would apply after one or more of the trigger events has occurred should also be specified clearly in fallback provisions. The replacement date should occur on the date on which the benchmark has effectively ceased to be provided or is no longer representative, or any other point in time to be contractually determined. For such purposes, the relevant announcements from the administrator and/or the regulatory supervisor are expected to include the date of cessation, or, if applicable, the date from which the benchmark will cease to be representative.
- 4. Market participants should seek consistency and use the same trigger events for all asset classes when developing and introducing fallback provisions in different financial instruments and contracts referencing EURIBOR, to the extent possible and appropriate. Market participants are encouraged to consider the risks derived from using different fallback trigger events.
- 5. Market participants should consider at least those trigger events included in Article 23b(2) of the EU Benchmark Regulation (as amended by Regulation (EU) 2021/168 of 10 February 2021) which grant the European Commission the power to designate one or more replacement rates under certain circumstances and upon occurrence of one of four trigger events. These trigger

³ This also covers other forms such as funds' prospectuses or offering documents.

Note that, as stated in the public consultation on EURIBOR fallback trigger events, the definition of temporary trigger events and their effects lie beyond the scope of the working group's mandate.

3.2 Permanent and pre-cessation EURIBOR trigger event recommendations

- 6. Market participants are recommended to include as a trigger event a public statement or publication of information by or on behalf of the regulatory supervisor of the EURIBOR administrator or the EURIBOR administrator stating that said administrator has ceased or will cease to provide EURIBOR permanently or indefinitely provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide EURIBOR.
- 7. Market participants are recommended to include as a trigger event an official public statement by or on behalf of the supervisor of the EURIBOR administrator that, in its view, (i) EURIBOR is no longer representative, or will no longer be representative of the underlying market it purports to measure as of a certain date, and (ii) such representativeness will not be restored (as determined by such supervisor). The announcement made by the supervisor should specify the date on which the rate loses/will lose its representativeness and should be made with the awareness that it could engage certain contractual triggers to fallback provisions included in contracts. The working group acknowledges that, as of today, a EURIBOR non-representativeness trigger event is not part of the International Swaps and Derivative Association (ISDA) fallback provisions. The working group encourages trade associations (including ISDA) to consider including such an event in their EURIBOR fallback standard documentation, if any, in order to increase global consistency across currencies and products.
- 8. Market participants should consider the appropriateness of including as a trigger an event in which use of EURIBOR has become, for any reason, unlawful for relevant parties to the agreement or in which such parties have otherwise become prohibited from using EURIBOR.⁶

 The inclusion of such a trigger event may be more appropriate where it is already standard practice in the relevant market, or where it is required by applicable local laws. Whether

The EU Benchmark Regulation splits Recommendation 6 into two different events: i) a public statement or publication of information by or on behalf of the regulatory supervisor of the EURIBOR administrator that said administrator has ceased or will cease to provide EURIBOR permanently or indefinitely, and ii) a public statement or publication of information by or on behalf of the EURIBOR administrator that said administrator has ceased or will cease to provide EURIBOR permanently or indefinitely.

⁶ Among other reasons, the withdrawal of the authorisation of the EURIBOR administrator should also be understood as an unlawfulness trigger event, at least, for entities subjected to BMR. The competent authority for the administrator of EURIBOR may withdraw or suspend the authorisation in accordance with Article 35 of the BMR or the recognition in accordance with Article 32(8).

including such a trigger is appropriate and what legal effects it should have may vary on a product-by-product basis. Particularly, market participants should consider the different legal consequences that such a trigger might have among relevant parties in cross-border transactions or financial products in which multiple parties may be involved. In these situations, the working group acknowledges that the inclusion of such a trigger could be challenging and complex, and encourages market participants to consider potential cross-jurisdictional implications when deciding whether to include it and how to deal with this event. In addition, this trigger event should be analysed in the context of other illegality provisions that may be included in the contract or financial instrument. Market participants should make their own independent assessment and decision in relation to the compatibility of this trigger event and such illegality provisions.

- 9. Market participants should consider the appropriateness of including as a trigger an event in which EURIBOR is permanently no longer published, i.e. without any previous official announcement by the competent authority or the administrator. The working group highlights that this event is highly unlikely to occur and recommends that parties consider the risk and opportunities of including it when entering into the contract. If parties finally agree to include it, given that, contrary to Recommendation 2 above, the trigger will not be objectively verifiable by reference to a public announcement, special attention should be given to the number of days without publication that would trigger the event, as it might set the limits between a temporary non-availability and a permanent cessation event.
- 10. Material change in the EURIBOR methodology as defined by the European Money Markets Institute (EMMI)⁹ should not result in an automatic trigger event. Nevertheless, the working group underlines the freedom of parties to agree, when entering into the contract, either (1) to acknowledge that references in contracts to EURIBOR are to be understood to be references to EURIBOR calculated as per the methodology as currently approved, or (2) to provide parties the opportunity to discuss, for certain asset classes, whether (i) to continue the contract with the materially changed EURIBOR or (ii) to fall back on the EURIBOR fallback rates included in the contract.

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For example, where such an event only affects the ability of a single party or group of parties to a multilateral contract which references EURIBOR, market participants may consider it disproportionate to trigger a fallback if the event does not pose a fundamental risk to the continued viability of the contract. If the event affects one of the parties to a derivative, however, inclusion of a trigger may be felt to be more proportionate, particularly if it prevents the calculation, payment or receipt of payments which are fundamental to the transaction

Benchmark discontinuation language in mainstream debt programme prospectuses, syndicated loans and structure finance bilateral loans typically include an unlawfulness trigger. An example of such a trigger in debt programmes is if it becomes unlawful for the issuer or agent to calculate any payments due on the notes.

See EMMI Benchmarks Changes and Cessation Policy. Reference D0488D-2014 V2.

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4 Recommendations on €STR-based EURIBOR fallback rates

4.1 Composition of a €STR-based EURIBOR fallback rate

The working group's recommendations for an appropriate EURIBOR fallback rate for specific use cases will be based on:

- (a) a €STR-based term structure methodology for each financial product assessed against a list of key selection criteria;
- (b) a spread adjustment methodology used to avoid potential value transfer if a fallback is triggered.

In addition, the working group will provide recommendations for the market conventions which could be used to calculate the compounded term rate based on the €STR.

The working group acknowledges the EURIBOR fallback measures for derivatives products which ISDA included in (1) the 2006 ISDA Definitions for new transactions and (2) the IBOR Fallbacks Protocol for legacy contracts, if market participants choose to adhere to it. The working group's recommendations for an appropriate EURIBOR fallback rate will therefore only include specific use cases for cash products.

4.2 Recommendations for a €STR-based term structure methodology for specific use cases

The following recommendations for a €STR-based term structure methodology for specific use cases are based on a set of agreed selection criteria, which respondents to the public consultation considered appropriate, exhaustive, comprehensive and robust.

The working group considered two types of €STR-based term structure methodology as a component of EURIBOR fallback measures:

- Forward-looking term structures would be based on quotes and transactions in the derivatives
 markets referencing the €STR and reflect market expectations of the evolution of the €STR
 during the upcoming interest rate period. They would be known at the start of the interest rate
 period.
- Backward-looking term structures are based on simple mathematical calculations of the value
 of past realised daily fixings of the overnight risk-free rate by compounding the fixings over a
 given period of time. The working group considered the payment delay, the lookback period
 and the last reset methodologies as viable for specific asset classes.

The official sector (European Central Bank, European Commission and European Securities and Markets Authority) welcomes the work done by the working group. Without prejudice to the detailed fallback recommendations, the official sector stresses the importance of effective availability when choosing a fallback rate. In line with the Financial Stability Board's

recommendations, the official sector considers that the greater robustness of compounded risk-free rates makes them a more suitable alternative than forward-looking term structures which have yet to be developed. ¹⁰

For use cases for which a forward-looking term structure is preferred, the working group therefore recommends that market participants use a simple two-level waterfall fallback structure. On the first level, market participants could include a forward-looking term structure methodology. For the second level, the working group recommends that market participants include either the backward-looking lookback period methodology or the last reset term structure methodology. The backward-looking term structure methodology on the second level of the waterfall structure will function as a backstop if the forward-looking term structure methodology was not (yet) available when the EURIBOR fallback measure was triggered.

Please refer to the appendix for a summary overview of the recommendations for a €STR-based term structure methodology per specific use case.

For a detailed discussion on the term structure methodologies and selection criteria, please refer to the public consultation document.

4.2.1 Corporate lending products

The public consultation results on corporate lending products showed that:

- 58% of the respondents preferred the backward-looking lookback period methodology;
- 40% of the respondents preferred the forward-looking methodology with a waterfall structure.

The working group therefore recommends market participants, based on their institution's and counterparty's needs, to consider either:

- a backward-looking lookback period methodology with no requirement for a waterfall structure.
 This would be more appropriate, for example, where consistency is required between cash and derivative products to avoid hedging discrepancies; or
- a two-level waterfall solution consisting of a forward-looking methodology on the first level and a
 backward-looking lookback period methodology on the second level of the waterfall. This would be
 more appropriate, for example, for corporates which require the rate at the start of the interest
 period.

4.2.2 Retail mortgages, consumer loans and loans to small and medium-sized enterprises

The results of the public consultation supported the main conclusions from the use case analysis performed for retail mortgages, consumer loans and loans to small and medium-sized enterprises

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¹⁰ The recommendations are without prejudice to the statutory replacement powers vested with the European Commission under Article 23b of the EU Benchmark Regulation.

(SMEs). The working group would therefore recommend market participants to include as a EURIBOR fallback rate a two-level waterfall solution:

- On the first level of the waterfall, a forward-looking methodology;
- On the second level of the waterfall, market participants could consider the appropriateness of referencing a backward-looking methodology based on either (i) a last reset methodology (up to three months)¹¹, where it should be ensured that the borrower knows the rate at the beginning of the interest period, or (ii) a lookback period methodology, where it is not necessary for the borrower to know the rate at the beginning of the interest period and hedging aspects are considered a more critical consideration.

4.2.3 Current accounts

The public consultation results for current accounts showed that:

- 57% of the respondents favoured a backward-looking payment delay methodology;
- 17% of the respondents preferred a different fallback methodology.

Important to note is that 26% of the respondents registered no opinion on which fallback methodology would be most appropriate for current accounts, given that many current accounts today are remunerated using overnight rates and are therefore not subject to a EURIBOR fallback solution.

Acknowledging that 77% of the respondents who provided an opinion on current accounts prefer a backward-looking payment delay methodology, the working group recommends that market participants who do use EURIBOR in current accounts should consider a backward-looking payment delay methodology with no requirement for a waterfall structure. This would represent a transparent and simple to implement methodology as current accounts do not require rates and interest coupons to be known to customers in advance.

4.2.4 Trade finance

Based on the significant majority support for the proposals from the public consultation, the working group would make the following recommendation for trade finance products:

As outlined in the public consultation paper, using the last reset methodology for periods longer than three months may create additional accounting (IFRS9 solely payments of principal and interest test) and hedging challenges. Where EURIBOR references a period longer than three months (for example, six-month or 12-month fixings) and the fallback is the backward-looking last reset methodology for a tenor up to three months, an additional credit adjustment to the fixing period should, where possible, be applied in order to minimise any value transfer. The use of longer tenors (a last reset methodology for six-month or 12-month fixings) may imply a less accurate reflection of the current interest rate environment and its use should consequently be assessed by market participants.

A two-level waterfall solution consisting of a forward-looking methodology on the first level and a backward-looking last reset methodology (up to three months)¹² on the second level of the waterfall.

The above waterfall structure ensures that coupon rates and amounts are known to clients in advance. As most financing dedicated to trade is extended on a discounted interest basis, this typical trade finance feature prevents the usage of benchmark rates known in arrears – the interest chargeable must be known by the time the funds are disbursed.

4.2.5 Export and emerging markets finance products

Based on the feedback on the public consultation, the working group recommends a two-level waterfall solution for export and emerging market finance products for which counterparties prefer to know the interest rates and amounts in advance:

- On the first level of the waterfall, a forward-looking methodology;
- On the second level of the waterfall, market participants could consider the appropriateness of referencing a backward-looking methodology based on either (i) a last reset methodology¹³ where it should be ensured that the borrower knows the rate at the beginning of the interest period, or (ii) a lookback period methodology where it is not necessary for the borrower to know the rate at the beginning of the interest period and hedging aspects are considered a more critical consideration.

For export and emerging markets finance products for which counterparties agree that it is not necessary to know the rate at the beginning of the interest period and hedging aspects are considered a more critical consideration, the working group recommends:

Backward-looking lookback period methodology with no requirement for a waterfall structure.

4.2.6 Debt securities

Based on both the significant majority support for the proposals from the public consultation, and the issuances already observed in the capital markets, the working group would make the following recommendation for debt securities:

Backward-looking lookback period methodology with no requirement for a waterfall structure.

This recommendation follows the overall feedback from the public consultation, allowing consistency with the derivative market as well as consistency with other regions.

13 Idem.

¹² Idem.

4.2.7 Securitisations

The responses from the public consultation showed clear majority support for the proposal for consistency between the issued securities and underlying securitised assets. The working group would therefore make the following recommendation for securitisations:

A €STR-based term structure methodology that is consistent with the a €STR-based term structure methodology in the underlying securitised assets.

It is acknowledged that parties may determine that it is necessary to have consistency with other debt market products. Market participants could therefore also consider the appropriateness of having consistency with other debt securities, for which the backward-looking lookback period methodology is recommended (refer to chapter 4.2.6), particularly if derivative instruments are available to manage the basis risk on the underlying assets.

4.2.8 Transfer pricing models

For transfer pricing models there was no conclusive outcome for either a forward-looking or backward-looking approach. What should be noted here is that a significant minority of respondents provided no opinion, especially concerning transfer pricing models for non-financial corporates. The working group would see the validity of either approach and therefore leaves it to the discretion of the individual market participant to embed a EURIBOR fallback measure into their transfer pricing models which seems best suited from the institution's perspective.

4.2.9 Investment funds

Since there was no conclusive outcome to the public consultation, the working group would not make a specific recommendation for the fallback language for investment funds. For investment funds, the working group recognises the validity of both a forward-looking methodology, in order to simplify transition, and a backward-looking methodology, in order to have consistency with hedging derivatives and debt products.

4.3 Recommendations for a credit spread adjustment

In order to ensure economic equivalence between EURIBOR and the corresponding €STR term structures (forward-looking or backward-looking), the working group recommends calculating and applying a spread adjustment which reflects the value of a bank's credit risk and other premia embedded in EURIBOR. The working group will refer to that as a spread adjustment.

a) The five-year historical median spread adjustment methodology should be the preferred approach for cash products.

This approach is transparent, widely recommended/adopted (e.g. by working groups in other jurisdictions and by ISDA for derivatives) and the calculation is relatively straightforward and has less significant drawbacks than other methodology suggestions.

- a) It is highly desirable that the above approach should be applied across EURIBOR and other IBOR-linked cash products.
- b) The spread adjustment value for each individual tenor should be the same irrespective of the term structure methodology chosen (e.g. forward-looking and backward-looking).
 - Recommendations b) and c) would reduce complexity, avoid confusion and broaden market acceptance. They would also reduce risk management costs and reflect market participants' desire for a simple solution.
- c) Should the historical €STR market data be insufficient to compute an adjustment spread, data can be obtained by using historical EONIA market data with a fixed spread of 8.5 basis points between the two indices, given that EONIA has been recalibrated to €STR + 8.5 basis points.
 - Clearly this will become less relevant over time as the history of €STR fixings builds up.
- d) No one-year transition period is required.

While a transition period could help those requiring more time to implement, it would add complexity and be inconsistent with ISDA's approach for derivatives.

4.4 Recommendations for conventions when using a €STR-based backward-looking term structure methodology

- a) For those cash products for which the working group suggests using a backward-looking term structure, the working group recommends that market participants use the compounded €STR average rates, as will be published by the European Central Bank as of 15 April 2021.
- b) The working group recommends the publication of the spread adjustment and/or an all-in rate that consists of (i) compounded €STR average rates with an observation shift, and (ii) the five-year historical median spread adjustment.
 - The working group will therefore launch a call for interest to benchmark administrators once the recommendations on EURIBOR fallback trigger events and €STR-based EURIBOR fallback rates are published.
- c) If a floor is applied in a contract, the working group recommends applying the floor to the compounded €STR rate plus the five-year historical median spread adjustment, in order to maintain economic equivalence before and after the application of the EURIBOR fallback.
 - The working group notes that certain market segments and parties may choose to include a floor on the daily €STR value, for example in the syndicated loan market to align with the recommendations of the sterling working group on risk-free reference rates for sterling overnight index average (SONIA) loan market conventions and the US alternative reference rate committee in its secured overnight financing rate (SOFR) "in arrears" conventions for syndicated loans.

- d) Based on the simpler calculation methodology and consistency with the derivative market, the working group recommends the compounding-the-rate methodology.
- e) For those cash products for which the working group suggests a backward-looking lookback period methodology, the working group recommends that market participants use the observation shift methodology, with the use of the lag approach as a robust alternative to the observation shift approach.

It should be noted that in the use case in which a compounded €STR rate is used as part of an index calculation, only the observation shift methodology is seen as compatible.

Appendix – summary of recommended €STR-based term structure methodology per use case

	Corporate lending		Retail mortgages/consumer loans/SME loans		Current accounts	Trade finance
	If consistency between hedged loan and hedging derivative is prevailing	If knowing the rate at the start of the interest rate period is prevailing	If knowing the rate at the start of the interest rate period is prevailing*	If consistency between hedged loan and hedging derivative is prevailing*		
Fallback methodology recommended for the first level of the waterfall	Backward-looking lookback period	Forward-looking	Forward-looking	Forward-looking	Backward-looking payment delay	Forward-looking
Fallback methodology recommended for the second level of the waterfall (if needed)	N/A	Backward-looking lookback period	Backward-looking last reset (up to 3 months)	Backward-looking lookback period	N/A	Backward-looking last reset (up to 3 months)
	Export and emerging markets finance products		Debt securities	Securitisations	Transfer pricing models	Investment funds
t	If knowing the rate at the start of the interest rate period is prevailing	lf consistency between hedged loan and hedging derivative is prevailing				
Fallback methodology recommended for the first level of the waterfall	Forward-looking	Backward-looking lookback period	Backward-looking lookback period	Same as underlying asset**	No recommendation	No recommendation
Fallback methodology recommended for the second level of the waterfall (if needed)	Backward-looking last reset (up to 3 months)	N/A	N/A			

More than two-thirds of responses to be in favour of any of the proposed solutions to provide a recommendation
Less than two-thirds of responses to be in favour of any of the proposed solutions to provide a recommendation

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For most of the specific terminology, please refer to the ECB glossary.

^{*} For retail mortgages and consumer/SME loans, these comments specifically refer to the second level of the waterfall (if needed)

^{**} For securitisations, market participants could also consider consistency with other debt securities