EUROPEAN CENTRAL BANK

EUROSYSTEM

**ECB-PUBLIC**
21 November 2019

# Meeting of the working group on euro risk-free rates

held in Frankfurt am Main on Wednesday, 16 October 2019, 10:30 to 17:00 CET

## SUMMARY

### 1. Introductory remarks, approval of the agenda and obligations of the working group members under competition law

**Steven van Rijswijk (Chair)** opened the meeting recalling that the first important milestone in the transition from EONIA to the €STR had been reached on 2 October with the first publication of the €STR by the ECB at exactly 08:00 CET and the first publication of the recalibrated EONIA by the European Money Markets Institute (EMMI) at exactly 09:15 CET. **Mr van Rijswijk** thanked the ECB, EMMI and the working group for this achievement and stressed that the working group would continue to remind all market participants of the work that needed **to be done in order to complete the transition from EONIA to the €STR before 3 January 2022**.

**Steven van Rijswijk (Chair)** asked the members of the working group on euro risk-free rates to approve the agenda for the meeting and reminded them of their obligations under EU competition law, as described in the guidelines on compliance with EU competition law published on the ECB's website.

### 2. Update by subgroup 7 on communication and education

**Maite Bermúdez (Santander)** updated the working group on the current status of three information documents that had been distributed to the group for comments: (i) a frequent Q&A document, (ii) a basic set of slides for all market participants for their possible use, and (iii) EONIA to €STR "Check list'' for benchmark users. The documents would be published on the ECB's website shortly after final approval by the working group members. She also updated the group on the progress made by subgroup 7 since the previous meeting. Three work streams had been established in order to cover the communication issues related to (i) the transition from EONIA to the €STR, (ii) EURIBOR fallbacks, and (iii) information for retail customers. The "key messages'' to be passed on had been collected from the chairs of the various subgroups and would be used by the three work streams of subgroup 7 in their respective communication plans. Subgroup 7 was also considering appointing national "ambassadors" who would be responsible for developing communication measures in conjunction with local authorities across each euro area country. The subgroup was also considering a range of other initiatives, including establishing a monthly newsletter, holding webinars and drawing up a contact list of banking and market associations for better outreach.

Subsequently, the Chairs of the three work steams, **Olivier Hubert (BPCE/Natixis), Nathalie Gay-Guggenheim (HSBC)** and **Juan Cebrián (CaixaBank)** outlined their communication plans for their respective work streams, including objectives, target audience, materials to be produced, communication channels and timeline.

In the discussion which followed, a number of working group members flagged the fact that public authorities could play an important role in communicating the transition to risk-free rates and the need for robust EURIBOR fallbacks (taking the example of the Single Supervisory Mechanism's letter sent to supervised entities in July 2019 on banks' preparations with regard to interest rate benchmark reforms and the use of risk-free rates). In this context, working group members were informed that a roundtable with national competent authorities would be organised by the European Securities and Markets Authority (ESMA) later in October. The ECB representatives also recalled that the ECB had already achieved a great deal in terms of communication, including website publications, attendance at conferences, organisation of roundtables and participation in international fora. There was therefore arguably little scope for further action. The ECB had also been in close contact with the national central banks of the euro area as part of its standing committees. Working group members also discussed the possibility of the "ambassador concept'' also covering international markets, i.e. beyond the euro area.

Lastly, members of the working group were informed that Bank of America Merrill Lynch, ABN AMRO and the Spanish Banking Association (AEB) had joined subgroup 7. The list of institutions on the ECB's website would be updated accordingly.

### 3. Update by the International Swaps and Derivatives Association (ISDA) on its plans for a consultation on EURIBOR fallbacks

**Rick Sandilands (ISDA)** updated the working group members on ISDA's work to provide robust fallbacks for key interbank offered rates (IBORs) and its plans for a consultation on EURIBOR and EUR LIBOR fallbacks for derivative contracts.

He indicated that ISDA had launched a supplemental consultation on final parameters for the fallback rate methodologies that would apply with respect to those IBORs already consulted on (USD, JPY, CHF, HK, GBP, CAD and AUD IBORs). He explained that the consultation was due to close on 23 October 2019 (DL 23/10). **Mr Sandilands** encouraged all interested market participants to provide feedback on this consultation by 23 October 2019.

ISDA intended to launch a supplemental consultation on the EUR LIBOR and EURIBOR fallbacks some time after the results of the parameters consultation had been published. The EUR LIBOR and EURIBOR consultation would request feedback on:

(i) market participants' preferred term adjustment methodology (including whether market participants preferred the same adjustment (compounding in arrears) to be used for EURIBOR and EUR LIBOR fallbacks, as for the other rates already consulted on;

(ii) market participants' preferred credit spread methodology (including whether market participants preferred the same adjustment (historical mean/median) to be used for EURIBOR and EUR LIBOR fallbacks, as for the other rates already consulted on.

ISDA's representative indicated that if the feedback from the various consultations was sufficiently aligned, ISDA might consider amending the 2006 ISDA Definitions to include provisions for EURIBOR and EUR LIBOR fallbacks and in the supplement that will amend the 2006 ISDA Definitions to incorporate fallback provisions for the other IBORs already consulted on, as well as a protocol that will allow market participants to amend their legacy trades to include such provisions.

### 4. Update by subgroup 2 on term rates methodologies and handover to subgroup 5

**Patrick Chauvet (BNP Paribas)** updated the working group on the remaining two deliverables for subgroup 2, which would be discontinued as of the meeting following the subgroup's mandate having been accomplished.

Regarding the work on credit spread methodologies, the working group was reminded of the analysis carried out by subgroup 2A of the various approaches to dealing with the spread difference between the EURIBOR and the €STR-based term structure methodologies (as presented during the working group meeting of 29 August 2019): (i) historical credit spread methodology, (ii) forward credit spread methodology, and (iii) dynamic credit spread methodology. Subgroup 2's main findings regarding the preparation of a possible future public consultation on credit spread methodologies were presented and discussed. In particular, the working group agreed with subgroup 2's conclusion that the "dynamic credit spread methodology" was not practical for the purpose of the EURIBOR fallbacks and a future working group consultation should therefore not include it as a feasible option (while outlining the reasons for ruling out that option, as detailed by Subgroup 2 analysis).

The practical preparation of such a public consultation would be performed by subgroup 5 once it had conducted its analysis of the most relevant EURIBOR fallback methodology for each financial product. In the discussion which followed, **Holger Neuhaus (ECB)** noted that the working group should consider launching a comprehensive consultation covering the credit spread methodologies in conjunction with the working group's findings on the relevant term structure methodologies by asset class. This would allow both users and respondents to take a holistic view and would also make it easier for the working group to interpret the replies received.

Regarding the technical analysis of the coexistence of backward-looking and forward-looking term structure methodologies, the working group discussed a number of high-level considerations developed by subgroup 2 on how to hedge the potential mismatch between a cash product with a forward-looking fallback rate and a hedging derivative with a backward-looking fallback rate. These considerations would also serve as input for the analysis of suitable fallback rates by asset class to be performed by subgroup 5.

**Steven van Rijswijk (Chair)** thanked the subgroup 2 leaders, the members of the subgroup and the ECB Secretariat for their work since the subgroup's inception. The valuable analysis carried out by subgroup 2 would be picked up by subgroup 5 in their overall analysis of EURIBOR fallbacks by asset class. **Mr van Rijswijk** encouraged subgroup 2 members to continue their work in the context of subgroup 5. On behalf of BNP Paribas, as Chair of subgroup 2, Patrick Chauvet thanked the subgroup 2 workstream leaders, Alberto Covin (UniCredit), Carlos Infesta (Santander) and Neil McLeod (Erste Group), as well as the members of subgroup 2 and the ECB Secretariat for their contributions.

Some working group members stressed the need for the working group to address EUR LIBOR fallbacks. **Holger Neuhaus (ECB)** explained that, while EUR LIBOR did not fall within the working group's mandate, market participants were free to apply the working group's considerations on EURIBOR fallbacks to EUR LIBOR as well.

## 5. Presentations from administrators that expressed interest in producing a €STR-based forward-looking term structure that could serve as a fallback in EURIBOR-linked contracts

**Steven van Rijswijk (Chair)** welcomed **Alex Nourry (Clifford Chance)** for providing guidance (see Annex 1[1]) and joining this part of the meeting on a pro bono basis to ensure that the discussion which followed was in accordance with competition law.

Following the call for expressions of interest in July 2019 for administrators involved in producing a €STR-based forward-looking term structure that could serve as a fallback in EURIBOR-linked contracts, four interested administrators (EMMI, FTSE Russell, ICE Benchmark Administration, Refinitiv) had indicated their interest in presenting their plans at the meeting. Each administrator was allocated a time slot of the same length that included a presentation prepared by the administrator and a Q&A session based on a standard set of questions (see Annex 2[2]). The administrators were informed that the presentations would be published on the ECB's website shortly after the meeting and that the discussion would be minuted. According to the guidance provided by Clifford Chance (Annex 1), representatives of the WG and/or SG2 affiliated to a potential service provider should not participate in the meeting with potential benchmark administrators. Some WG members recused themselves from attending item 5 of the meeting agenda (see attendance list below).

After the presentations given by the four benchmark administrators, working group members noted that the following additional issues would require consideration: (i) in the light of Brexit, the location of the administrator could play a role, (ii) it was unclear how much time would need to pass before the administrators could publish these future forward-looking term rates – this could therefore affect subsequent discussions on the suitability of a forward-looking rate as EURIBOR fallbacks, and (iii) for competition law reasons, the working group will not be able to choose or recommend a particular benchmark administrator, and will instead leave this choice to market participants and benchmark users.

In reply to a question, **Cornelia Holthausen (ECB)** explained that the ECB was not in a position to encourage swap dealers to provide tradable quotes so as to support the feasibility of the forward-looking term rates based on the €STR. **Tilman Lueder (European Commission)** recalled that certain interest rate swaps were required to be traded on pre-trade transparent platforms, and in this context European regulators could investigate whether this might be a way of accessing available data. However, only euro-denominated LIBOR and EURIBOR swaps were subject to this trading obligation, and the scope of the EU trading obligation for interest rate swaps would need to be enlarged to swaps referencing other benchmarks. Such a solution should therefore not be taken for granted at this stage.

**Cornelia Holthausen (ECB)** asked whether the working group might also consider launching a similar call for expressions of interest for the computation of backward-looking term rates. While some working group members pointed to the simplicity of calculating such rates compared with forward-looking term structure methodologies, others noted that calculation conventions could differ and that the publication by an administrator would be beneficial.

## 6. Update by subgroup 5 on cash products and derivatives

**Steven van Rijswijk (Chair)** updated the group on some recent public announcements from different market participants (Central Counterparty Clearing House (CCPs)/trading platforms). The working group members were also informed about follow-up work regarding a working group recommendation relating to the possibility of CCPs aligning their discounting switch dates as much as possible to transition from an EONIA discounting regime to a €STR discounting regime.[3] The Chair's team contacted the European Association of Central Counterparty Clearing Houses to discuss the possibility of coordinating among CCPs, also taking into account competition law considerations. So far CCPs' customers had expressed a preference for a time frame ranging between April 2020

[1] Guidelines on conducting meetings with potential benchmark administrators.

[2] List of standard set of questions addressed to the administrators, including their individual replies.

[3] See recommendation 6c of the Report on the impact of the transition from EONIA to €STR on cash and derivative products, August 2019: "*Date for switching the discounting curve from EONIA to the €STR: For cleared trades, the working group recommends that central counterparty clearing houses (CCPs) align their discounting switch dates as much as possible to transition from an EONIA discounting regime to a €STR discounting regime, which would represent a "big bang" approach for cleared markets. In addition, the CCPs are recommended to set the discounting switch date as early as possible, preferably towards the end of the second quarter of 2020.*"

and the end of June 2020, but individual CCPs would now discuss whether a more tightly defined period or date could be identified. The working group members would be kept informed of any further developments.

**Anna Kozhevnikova (Generali)** provided an update from subgroup 5, in particular on the progress made since the last working group meeting on how to develop a liquid €STR market (for both cash and derivative products) and on the intended timeline regarding developing recommendations on EURIBOR fallback solutions for cash and derivatives products. Regarding the development of a liquid €STR market, subgroup 5 had started (i) discussing the scope of the analysis, (ii) identifying product characteristics that could facilitate a seamless transition, (iii) identifying possible drivers for the creation of liquidity based primarily on the current EONIA market, and (iv) finding ways to measure the liquidity effectively, with a view to publishing a report covering these topics by the end of the year.

Regarding the proposed EURIBOR fallback solutions for cash and derivatives products, subgroup 5 was planning to start the analysis in November, with the aim of delivering an analysis by the end of the first quarter of 2020.

The working group discussed whether the analysis should focus solely on the transfer of liquidity from current EONIA-linked products to the new €STR-linked products, or whether the working group should also examine other products that were currently EURIBOR-linked, such as bond issuances or some types of loan. In this context, the ECB shared its concerns on the current over-reliance on EURIBOR and pointed to possible ways of addressing this, not only through the incorporation of contractual fallback language in contracts, but also by using alternative rates. The working group members would reflect further on the scope of its analysis, while agreeing that their current priorities were (i) to ensure the swift transfer of liquidity from the current EONIA-linked products to €STR-linked products, and (ii) to ensure that market participants have in place robust fallback clauses for current EURIBOR-linked products.

The working group would also follow up on some of its recommendations included in the report on the impact on cash and derivatives products of the transition from EONIA to the €STR, in particular on the feedback received on the recommendation 4 for derivatives and money market transactions.[4]

**7. Update by subgroup 3 on the EURIBOR legal action plan and presentation of the guiding principles for fallback language for new and legacy contracts referencing EURIBOR**

José Carlos Pardo (BBVA) presented the High level recommendations for fallback provisions in contracts for cash products and derivatives transactions referencing EURIBOR, which were designed to reinforce the messages already conveyed by the working group regarding the need for fallback provisions. The document also addressed the question of how to comply with Article 28(2) of the EU Benchmarks Regulation (BMR)[5] while the €STR term rate was not yet fully operational.

A status update on the ongoing work of subgroup 3 regarding specific fallback templates for different asset classes was also provided. Owing to the particular characteristics of asset classes, subgroup 3 had decided to break down the remaining work into three groups of asset class: (i) floating rate notes, securitisations and covered bonds, (ii) business loans, and (iii) mortgages and consumer loans. Subgroup 3 would, as far as possible, seek consistency with fallback provisions among asset classes and therefore the language could be drafted in such a way that they could be introduced in as many products as practicable. However, certain products might also have special characteristics that would need to be recognised and that warranted allowing recommendations to differ in certain circumstances. Subgroup 3 intended recommending specific EURIBOR fallback provisions for different asset classes in a public consultation, taking into account the importance of aligning fallbacks globally, as well as the inherent structural and legal limitations applicable to particular cash products.

The working group members discussed the challenge of amending legacy contracts and clarified the follow-up which would be involved, including the adoption of the high-level recommendations by written procedure before publication around the end of October.

**8. Update by subgroup 6 on financial accounting and risk management**

[4] See recommendation 4 of the Report on the impact of the transition from EONIA to €STR on cash and derivative products, August 2019: ‘’*Derivatives/money market transactions: Currently, EONIA-related transactions are, as a rule, settled on T+1. It is recommended that market participants switch to T+2 settlement, also to accommodate international (in particular Asian) market participants' operational requirements. Please note that, for money market transactions, this may entail a one-day difference between the payment dates of the nominal and the interest.’’*

[5] 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).

**Steven van Rijswijk (Chair)** reminded the working group that on 17 October the report on the risk management implications of the transition from EONIA to the €STR and the introduction of €STR fallbacks for EURIBOR would be published on the working group's website, together with an accompanying ECB press release. Likewise, a report on the financial accounting implications of the transition from EONIA to the €STR and the introduction of €STR fallbacks for EURIBOR was scheduled for publication at the end of that month.

**Markus Schmidtchen (KfW)** highlighted the main content of the financial accounting report which addressed the impact on amendments to contracts and hedge accounting of the transition from EONIA to the €STR and the introduction of €STR fallbacks for EURIBOR. The report also discussed the impact on other non-hedge-related financial standards, such as IFRS 13, IAS 19 or IAS 36, among others.

In addition, the working group members were informed that the International Accounting Standards Board (IASB) had announced on 26 September 2019 the amendment of some of its requirements for hedge accounting, in order to support the provision of useful financial information by companies during the period of uncertainty arising from the phasing out of interest rate benchmarks, such as IBORs. The IASB was following a gradual response to the reform of interest rate benchmarks; phase 1 culminated with the amendments issued in September and focused on the accounting effects of uncertainty in the period leading up to the reform, while phase 2 (currently ongoing) considered the potential consequences on financial reporting of replacing an existing benchmark with an alternative one.

**Steven van Rijswijk (Chair)** recalled that, with the publication of the financial accounting report, subgroup 6 would have accomplished the main objectives of its mandate. He therefore thanked the Chair of subgroup 6, the ECB Secretariat and the members of subgroup 6 for their valuable contribution. However, given that the working group and the various subgroups might require advice on financial accounting and risk management topics in the future, it was agreed that subgroup 6 would continue being available in "dormant mode" as an advisory group for future advice if required.

### 9. Reply from the European Commission to the working group on euro risk-free rates on the EMIR margin requirements in the context of the benchmark reform

**Steven van Rijswijk (Chair)** reminded the members that the working group had written to EU authorities on 2 July regarding the IBOR transition and compliance with EMIR margin requirements, in response to which the working group had received an official response from the European Commission on 2 October, published on the working group's website with other meeting documentation.

**Tilman Lueder (European Commission)** explained that the European Commission was working with the Finnish Presidency on a legislative approach that would accommodate the current reform of interest rate benchmarks. The "trilogue" between the three EU institutions (the Commission, the Council and the European Parliament) on this proposal was expected to begin in early 2020.

### 10. €STR fallback arrangements

**Marjolein de Jong-Knol (ING)** introduced a draft memorandum to be endorsed by the working group, which was intended to provide supervised entities with guidance on possible ways to comply with Article 28(2) of the BMR in contracts referencing the €STR. That article of the BMR required supervised entities to produce robust written plans setting out the actions that they would take in the event that a benchmark materially changes or ceases to be provided. Where feasible and appropriate, the plans should include the nomination of one or several alternative benchmarks that could be referenced to substitute the benchmarks no longer provided, indicating why such benchmarks would be suitable alternatives.

For this purpose, the working group assessed two possible options: (i) the selection of **one of the alternative rates** that had been considered in the first public consultation by the working group on the assessment of candidate euro risk-free rates, i.e. GC Pooling Deferred or RepoFunds Rate, or (ii) a recommendation to market participants to consider the **measures** that might be taken by the ECB as part of the **regular review of the €STR methodology and the policies and procedures in the case of a possible cessation of the €STR**, along with the fallback provisions provided by the working group in the EONIA to €STR Legal Action Plan.

Based on the assessment of both options, the working group came to the conclusion that the second option would provide the €STR with a sufficient fallback measure and therefore recommended market participants to follow this approach.

**Cornelia Holthausen (ECB)** did not object to the conclusions and reiterated that the ECB was obliged to adopt clear contingency solutions, along with policies and procedures for a possible cessation of the €STR. **Michele**

**Mazzoni (ESMA)** praised this initiative as being very timely. **The ESMA representative** clarified that, as a central bank, the ECB was exempt from the BMR; however, €STR users fell under the scope of the Regulation and should therefore ensure their compliance with Article 28(2) of the BMR. This draft memorandum was useful to reiterate this message and also that the €STR was very robust and here to stay.

## 11. Any other business

This was the last meeting attended by **Holger Neuhaus (ECB)** and **Stephanie Broks (ECB Secretariat).** The working group thanked them for their support as working group observer and Secretary respectively.

The next meeting of the working group would take place at the ECB on 4 December 2019, from 11:00 to 16:00 CET.

**Annex 1 – GUIDELINES FOR CONDUCTING MEETINGS WITH POTENTIAL BENCHMARK ADMINISTRATORS**

June 2019

GUIDING PRINCIPLES

This note is intended to provide guidance for conducting meetings between the working group on euro risk-free rates (hereinafter referred to as the "WG"), subgroup 2 (hereinafter referred to as "SG2") and potential providers of benchmark administration services in order to ensure compliance with applicable competition law. The following main principles should be observed:

- information which is competitively sensitive between the potential service providers (hereinafter referred to as "PSPs") may not be shared either directly or indirectly (for example, via the WG, SG2 or its members);
- information which is competitively sensitive between the members of the WG or SG2 may not be shared in the course of meetings with the PSPs;
- PSPs will be treated in an open, transparent, fair and non-discriminatory manner. Any qualification on participation must be uniform, non-discriminatory and must serve a legitimate purpose. These qualifications should be as narrowly drawn and objective as possible and should not leave room for arbitrary discretion in their application.

CONDUCT OF THE MEETINGS

- Every one of the PSPs should be present at their allocated slot at the meeting (they should not be in the room at the same time). Each PSP should be given a fair and equal opportunity to make any presentation and provide supporting materials.
- All participants should be reminded of their obligations under competition law at the start of the meeting. The representative of any WG and/or SG2 member affiliated to a PSP should not participate.
- Every one of the PSPs should be invited to present materials on the understanding that they will be published on the WG's website and should not therefore contain any competitively sensitive information.
- With regard to the content of the discussion at the meeting:
  - WG and/or SG2 members may engage in a general discussion covering perspectives on the sector's common needs in the development and application of open and objective minimum standards. This may include matters related to how requirements could best be met (covering areas such as experience, scope and functionality, technology, resilience, audit, and governance, etc.).
  - While the WG and/or SG2 may evaluate PSPs against agreed objective standards, they must not discuss, recommend or agree to refuse to deal with any PSP.
  - WG and/or SG2 members must respect the confidentiality of all PSPs and, in particular, must not pass on any competitively sensitive information received from another PSP.
  - WG and /or SG2 members must not do anything which suggests that a party is receiving special treatment.
  - WG and/or SG2 members should not discuss exclusions of future technological or market developments that might be aided by the services under discussion.
  - Accurate minutes should be recorded and published.

**Annex 2- Replies from the five administrators to the standard Q&A**

## European Money Market Institute (EMMI)

1. *Can you provide your ability/track record in generating non-contributory BMR compliant benchmarks? Please give examples*

   So far, no experience with tradable quotes-based benchmarks.

2. *The consultation outcome shows that market participants, given current euro area conditions, opt for a quote based methodology for a fallback term structure construction: it being a quote based on OIS's, which are usually traded on a number of electronic platforms/venues/Multilateral Trading Facilities, could you share with the working group how you plan to collect the largest amount of data? Please share the specific MTFs that you expect to use.*

   Consider setting partnerships.

3. *Can you describe to the working group your current access to OIS quotes, and how you plan to access them?*

   See previous answer.

4. *Can you briefly describe to the working group your fixing methodology (sampling, trimming, haircutting, averaging, etc.)?*

   Has to be adapted to the market. Will be determined following a consultation.

5. *Which is the market share (of OIS quotes) that you ultimately expect to gather for your methodology?*

   Enough for having a representative benchmark; premature to comment on this.

6. *What do you expect to be the frequency of publication?*

   Daily.

7. *Please share the sort of engagement from market makers that you think will be necessary for the benchmark to work. Is there any specific formal contract that market makers will have to sign? Do you foresee any issues with this point?*

   We don't think that this is part of a benchmark's administrator duty: a benchmark should reflect an existing market. We don't believe that a benchmark administrator should create a market for the sake of producing a benchmark.

8. *We have seen that in recent stress periods quotes in OIS markets virtually dried-up. How do you expect to deal with similar periods of market stress?*

   To be determined following consultation and set-up of a task force as well as engagement with the working group but hierarchy could be considered; possibly referring also to OIS transactions and futures; revaluate it in the future.

9. *The fallback will need to be calculated for an indefinite period of time since it will be written in very long-term contracts. What is your plan to ensure long-term production of the benchmark?*

   Long-term commitment and part of being administrator of EURIBOR; not commercially driven

10. *Do you plan to charge users for using the benchmark?*

EMMI considers the index as the provision of a public good.

**FTSE Russell**

1. *Can you provide your ability/track record in generating non-contributory BMR compliant benchmarks? Please give examples*

   FTSE Russell calculates over 250,000 EU BMR compliant benchmarks on a daily basis. The benchmarks span a range of markets and asset classes, and are a combination of contributory and non-contributory benchmarks. Non-contributory benchmarks include the Russell series, FTSE 100, FTSE MIB, and the FTSE World Government Bond Index (WGBI).

2. *The consultation outcome shows that market participants, given current euro area conditions, opt for a quote based methodology for a fallback term structure construction: it being a quote based on OIS's, which are usually traded on a number of electronic platforms/venues/Multilateral Trading Facilities, could you share with the working group how you plan to collect the largest amount of data? Please share the specific MTFs that you expect to use.*

   FTSE Russell has been working with LCH, TP ICAP and Tradition to evaluate term rate methodologies and explore existing market data sources.

   TP ICAP is a global firm of professional intermediaries that plays a pivotal role in the world's financial, energy and commodities markets. i-Swap is its electronic trading platform for OTC interest rate derivatives.
   Tradition is a leading global interdealer broking firm, with a presence in 28 countries. Trad-X is its multi-asset class trading platform for OTC derivatives.

   FTSE Russell expects to capture a large proportion of the dealer to dealer OIS market. LSEG and FTSE Russell are open access market infrastructure providers, so there is no exclusive arrangement with our partners. FTSE Russell is open to others joining as partners so long as their addition improves the robustness and representativeness of the rate.

3. *Can you describe to the working group your current access to OIS quotes, and how you plan to access them?*

   FTSE Russell does not currently have access to OIS quotes data for live benchmarks. FTSE Russell will access OIS quotes via its data partners, who support CLOBs for the dealer to dealer market, as data becomes available. CLOBs for EONIA are well established and FTSE expects liquidity on CLOBs to develop for €STR OIS, particularly as €STR becomes eligible for clearing.

4. *Can you briefly describe to the working group your fixing methodology (sampling, trimming, haircutting, averaging, etc.)?*

   FTSE has not yet finalised its fixing methodology. It has however, set out a number of principles within which its methodology will conform. The methodology will depend on the data collected and market activity but FTSE Russell does not expect to deviate from classical methods. Initially FTSE Russell envisages multiple CLOBs will be used to provide OIS quote data.
   Sampling, discarding, and aggregating this information to derive a fixing without adding expert judgement. FTSE Russell expects the methodology to evolve.

5. *Which is the market share (of OIS quotes) that you ultimately expect to gather for your methodology?*

   FTSE Russell aims to capture a large proportion of the dealer to dealer OIS market. However, it will retain flexibility in the methodology and index design to be able to use alternative data sources should these become more liquid, representative and robust.

6. *What do you expect to be the frequency of publication?*

   Daily, with limited latency post snap/time window.

7. *Please share the sort of engagement from market makers that you think will be necessary for the benchmark to work. Is there any specific formal contract that market makers will have to sign? Do you foresee any issues with this point?*

   FTSE Russell recognise that consulting with market markers is essential, and with our platform partners we intend to engage more broadly across market makers and end users on benchmark design and incentives.

8. *We have seen that in recent stress periods quotes in OIS markets virtually dried-up. How do you expect to deal with similar periods of market stress?*

   FTSE Russell plans to use multiple CLOBs and supplement OIS data with additional data sources (i.e. futures). FTSE Russell is also considering incentives to dealers to submit quotes as part of its commercial model. In extremis, where there is insufficient data in the OIS and futures market to produce a robust rate, the previous day's value will be rolled.

9. T*he fallback will need to be calculated for an indefinite period of time since it will be written in very long-term contracts. What is your plan to ensure long-term production of the benchmark?*

   FTSE Russell has a long track record of producing reliable benchmarks. Index users have critical dependency on the information that index administrator provides, and FTSE Russell must ensure it remains a dependable partner so as not to erode the trust of its clients.
   FTSE Russell will also ensure its methodology is evolutionary and adapts to market changes appropriately.

10. *Do you plan to charge users for using the benchmark?*

    FTSE Russell has a commercial interest in this endeavour, but is cognisant of market participants' current costs for interest rate benchmarks. FTSE Russell is also a subsidiary of LSEG, a global market infrastructure provider, and many of the envisaged users of this product will have a number of touch points across LSEG.
    As such, FTSE Russell is committed to commercially sensible pricing and the possibility of staggering fees.

## ICE Benchmark Administration

1. *Can you provide your ability/track record in generating non-contributory BMR compliant benchmarks? Please give examples*

   ICE Benchmark Administration (IBA) is authorised under the BMR since 2018 and is administering the following non-contributory benchmarks:
   - the ICE Swap rate,
   - the LBMA Gold and Silver Prices and
   - the Tradeweb ICE U.S. Treasury Closing Prices.

2. *The consultation outcome shows that market participants, given current euro area conditions, opt for a quote based methodology for a fallback term structure construction: it being a quote based on OIS's, which are usually traded on a number of electronic platforms/venues/Multilateral Trading Facilities, could you share with the working group how you plan to collect the largest amount of data? Please share the specific MTFs that you expect to use.*

   IBA is already working with BGC Partners, TP ICAP and Tradition on the ICE Swap Rate, and Tradeweb regarding the Tradeweb ICE U.S. Treasury Closing Prices.

3. *Can you describe to the working group your current access to OIS quotes, and how you plan to access them?*

   IBA considers the following two work streams in order to access OIS quotes:
   1. The legal part : IBA has already agreements in place with electronic platforms
   2. The infrastructure / technical part: IBA will leverage its existing infrastructure used for the production of the ICE Swap Rate.

4. *Can you briefly describe to the working group your fixing methodology (sampling, trimming, haircutting, averaging, etc.)?*

   In line with the feedback to the consultation paper, IBA would like to use the ICE Swap Rate methodology as a basis as part of a waterfall methodology:
   - Level 1: €STR OIS swaps data, €
   - Level 2: €STR futures data,
   - Level 3: €STR futures settlement prices.

5. *Which is the market share (of OIS quotes) that you ultimately expect to gather for your methodology?*

   This will depend on market practice and how €STR is adopted (electronic vs. voice trading).

6. *What do you expect to be the frequency of publication?*

   Daily.

7. *Please share the sort of engagement from market makers that you think will be necessary for the benchmark to work. Is there any specific formal contract that market makers will have to sign? Do you foresee any issues with this point?*

   IBA does not foresee a direct relationship between the administrator and dealers. The relationship will be between the administrator and the trading platforms. Quoting in standard market sizes should be encouraged.

8. *We have seen that in recent stress periods quotes in OIS markets virtually dried-up. How do you expect to deal with similar periods of market stress?*

   IBA has designed the proposed waterfall methodology in order to ensure daily publication.

9. *The fallback will need to be calculated for an indefinite period of time since it will be written in very long-term contracts. What is your plan to ensure long-term production of the benchmark?*

   ICE Benchmark Administrator intends to look for a partner located in the euro area in building this fall-back rate. In addition, all necessary policies regarding change or cessation of the benchmark will be in place. Furthermore, the commercial framework will ensure the long-term production of the rate.

10. *Do you plan to charge users for using the benchmark?*

    Yes, IBA is considering a commercial framework for market participants originating EURIBOR-linked products. Tiered pricing, similar to some of IBA's other benchmarks (e.g. LIBOR) could be applied (per type, size of firms and/or usage). No firm proposal yet.

**Refinitiv**

1. *Can you provide your ability/track record in generating non-contributory BMR compliant benchmarks? Please give examples*
   Refinitiv calculates non-contributory benchmarks covering FX, interest rates, convertibles, equities, and commodities. Of these, the FX and interest rates benchmarks are most relevant to the term rate project.
   Since July 2018, the WMR Closing Spot Rates have been approved and authorised under EU BMR and subsequently administered in accordance with the EU BMR regulations. WMR Spots, Forwards and NDFs will be moved under EU BMR from 1st January 2020. The spot, forward and NDF benchmarks are based on traded prices, where appropriate, provided by three trading platforms and on streaming quotes data sourced from third parties via Refinitiv's own systems.
   Another example, the Refinitiv Convertible Index, will be administered within the scope of EU BMR from January 2020. The index is based on bond price data evaluated and published by the Refinitiv Pricing Service, and Commodity and Equity indices are calculated using exchange data.
   Beyond the scope of EU BMR, Refinitiv calculates certain families of benchmarks comprising FX spot and forward rates and implied interest rates, including ABS (Association of Banks in Singapore) SOR and Bank of Thailand THBFIX; TMA (Treasury Markets Association of Hong Kong) HKD and CNH spot FX rates; and TRYFIX which is an FX swap implied interest rate for Turkish Lira. Input data is sourced from Refinitiv's post-trade platforms, from market participants such as brokers and from trading platforms that include Refinitiv's and third-party platforms, depending on the benchmark.

2. *The consultation outcome shows that market participants, given current euro area conditions, opt for a quote based methodology for a fallback term structure construction: it being a quote based on OIS's, which are usually traded on a number of electronic platforms/venues/Multilateral Trading Facilities, could you share with the working group how you plan to collect the largest amount of data? Please share the specific MTFs that you expect to use.*
   Refinitiv is already engaged with leading MTFs to provide us with quote data from their Central Limit Order Books. We have signed NDAs and are therefore not at liberty to disclose their names at this point. We will be able to disclose the names when the negotiations have advanced further and/or agreements have been signed and the platforms waive the confidentiality. Related to this, Refinitiv is majority owner of Tradeweb.
   As one of the largest data vendors in the world, we have excellent relationships with all original sources of data and have also started to engage with additional sources of data.

3. *Can you describe to the working group your current access to OIS quotes, and how you plan to access them?*
   As a major data vendor, Refinitiv collects and distributes data from all the leading MTFs, exchanges and other trading venues. This data is distributed either freely or on a restricted client basis in accordance with the appropriate licensing arrangements. In addition, benchmarks that receive either contributions or readily available data for their determination make use of dedicated RICs and such input data is either made available or kept confidential in accordance with the benchmark methodology.

4. *Can you briefly describe to the working group your fixing methodology (sampling, trimming, haircutting, averaging, etc.)?*
   The optimal methodology will require consultation with stakeholders and testing as the design must reflect current market structure and liquidity. Refinitiv anticipates a design based on sampling the quotes from dealers for each specific tenor and received via the MTFs. Key methodology criteria such as suitable levels of sampling and filtering and the need for a waterfall of inputs will be subject to consultation and testing.

5. *Which is the market share (of OIS quotes) that you ultimately expect to gather for your methodology?*
   We expect to obtain quotes from at least three inter-dealer broker MTFs accounting for a significant fraction of OIS transactions. In addition, broker curves may be used to support quality control and surveillance and monitoring. Committed quotes are considered by Refinitiv to be the optimal source of data given the current

market structure. Any developments in the market, such as the feasibility of using traded spot OIS contracts as a source of input data, would be handled by means of a benchmark review and public consultation.

6. *What do you expect to be the frequency of publication?*
   We expect to publish the term rate initially once a day. If additional publication times are required, we will obtain that feedback during the consultation and will consider it favourably.

7. *Please share the sort of engagement from market makers that you think will be necessary for the benchmark to work. Is there any specific formal contract that market makers will have to sign? Do you foresee any issues with this point?*
   One requirement for the benchmark is to ensure that committed quotes are made available by the large derivative dealers on a consistent basis. The contractual relationships will be with the MTFs and it is anticipated that such MTFs will have, or will secure, the necessary rights to make OIS quotes available for the determination of the benchmark. In addition, the benchmark should benefit from the advice and experience provided by a broad advisory group of stakeholders including derivative dealers that meets regularly.

8. *We have seen that in recent stress periods quotes in OIS markets virtually dried-up. How do you expect to deal with similar periods of market stress?*
   As the administrator of the WMR Spot, Forward and NDF rates we have the experience of calculating benchmarks for a range of markets with very different characteristics which may include periods of reduced data quality. Consequently, we have a robust governance framework and a sophisticated range of quality controls which are used to monitor and assess the markets. Specific measures depend on benchmark methodologies that are developed to accommodate varying conditions in the underlying markets and may include a waterfall approach that incorporates references to related markets and to expert judgment as appropriate.

9. *The fallback will need to be calculated for an indefinite period of time since it will be written in very long-term contracts. What is your plan to ensure long-term production of the benchmark?*
   Refinitiv recognises the importance of permanence in the provision of benchmarks and is committed to the long-term production of the benchmarks it administers under both EU BMR and the IOSCO Principles for Financial Benchmarks. This is illustrated by the provision of Refinitiv’s Datastream bond indices since 1993 and the continuous publication of WM/R FX rates since 1994. For €STR-based term reference rates, we note that the OIS market referencing EONIA is highly liquid and that this liquidity is expected to migrate to €STR, leading to an active underlying interest for €STR-based term reference rates. This is significant factor for a robust and enduring benchmark that complies with EU BMR.

10. *Do you plan to charge users for using the benchmark?*
    Refinitiv does intend to charge users and to follow similar pricing structures already used by other private sector benchmark administrators. License types vary from individual usage license for market data terminals, to firmwide licenses covering pricing and valuation activities, redistribution licenses as well as specific licenses for development and trading of financial products either on exchange or OTC linked to the term rates.

**IHS Markit**

*[IHS Markit approached the ECB Secretariat for the WG on euro RFR after the 30 September deadline, to express an interest in making a presentation on €STR-based forward-looking term rates to the working group on euro risk-free rates at the next occasion. While a presentation to a physical meeting of the working group was no longer possible, the ECB Secretariat offered to publish their presentation as well as their replies to the standard Q&As on the ECB website, along with the replies of the other 4 administrators (IBA, EMMI, Refinitiv and FTSE).]*

1. *Can you provide your ability/track record in generating non-contributory BMR compliant benchmarks? Please give examples*

IHS Markit currently administers more than 29,000 benchmarks across financial, economic and commodity indicators, including our own proprietary indices and benchmarks administered for third parties, including major banks and asset managers. All of these benchmarks are currently administered by IHS Markit Benchmark Administration Ltd. ("IMBA") in compliance with the EU Benchmark Regulation ("EU BMR"). IMBA received FCA authorisation as Administrator under the EU BMR in July 2018 and can be found in the ESMA Register.

Our most well-known proprietary indices are in the Fixed Income and Derivatives asset classes, including the iBoxx bond indices and the iTraxx and CDX credit derivative indices. Across our various benchmark families, both proprietary and those managed for third parties, we have ample experience in using a large variety of different input data sources across various asset classes to create the most robust indices, including market data from exchanges and trading venues, evaluated prices, and contributions.

2. *The consultation outcome shows that market participants, given current euro area conditions, opt for a quote based methodology for a fallback term structure construction: it being a quote based on OIS's, which are usually traded on a number of electronic platforms/venues/Multilateral Trading Facilities, could you share with the working group how you plan to collect the largest amount of data? Please share the specific MTFs that you expect to use.*

IHS Markit has developed a globally consistent approach to the calculation of Term Risk Free Rates. Our approach is designed to produce the most robust €STR based Term Rates. Consistent with the European Benchmark Regulation and the IOSCO Principles, our €STR based Term Rates maximise the use of transactions as input data. We have identified appropriate input data sources and designed a methodology that would result in the calculation of a fully transaction-based €STR based Term Rate in most cases.
Our methodology maximises the amount of useable transaction input data by (1) including both futures and OIS data, (2) utilising a 24 hour observation period, (3) considering both spot starting and forward starting OIS transactions, and (4) capturing transactions across the whole range of modes and venues of trading.
Our methodology employs a 6-level waterfall approach to embed fallbacks in the calculation if there is a market disruption or change in liquidity. If and when central limit order books ("CLOBs") develop for €STR OIS we would intend to capture this data to use for corroboration or on lower levels of our waterfall. As such, we would use quotes data directly in the calculation of €STR based Term Rates only if there was insufficient transaction volume to meet the minimum thresholds for transactional data that we set at Priority 1 of our pricing waterfall.

3. *Can you describe to the working group your current access to OIS quotes, and how you plan to access them?*

As noted above the calculation of the IHS Markit €STR based Term Rates will be fully transaction-based in most cases. According to our methodology, OIS quotes would only be relevant for the calculation as fallbacks or for corroboration as defined in the 6-level waterfall.
We have discussed gaining access to quotes for such use with the various relevant trading venues, including Inter-Dealer-Brokers and Dealer-to-Client platforms. We are confident that we will be able to access quotes

data from several of these trading venues once these venues actually operate CLOBs and such quotes/orders exist.

4. *Can you briefly describe to the working group your fixing methodology (sampling, trimming, haircutting, averaging, etc.)?*

   We are using futures data (where liquid and available) to compute a base curve. We then use both OIS and futures transaction data to adjust the base curve up or down at each pillar point based on a volume-weighted approach. This approach allows the €STR based Term Rates to reflect the overall liquidity in the underlying market, whether transaction volume flows through the exchange (Futures) or OTC (OIS) markets. As liquidity between the exchange and OTC markets may evolve over time, it is important to protect the benchmark from future changes in the underlying markets.

   To qualify for inclusion in the calculation, OIS transaction data needs to pass several validation checks. Specifically, we only accept transactions that are centrally cleared, have at least one bank counterparty (wholesale trades), and a minimum transaction size of €10mm. We also screen for outliers. OIS data that has passed these validation checks will be used on a volume-weighted basis. We also set a minimum notional threshold (€500mm) for each tenor to determine whether a calculation can be performed on the Priority 1 level of the waterfall.

5. *Which is the market share (of OIS quotes) that you ultimately expect to gather for your methodology?*
   We have been in touch with all significant potential trading venues for €STR OIS. We expect to be able to subscribe to the data from several of those once liquidity actually exists. However, as explained above, we would only use such quotes as fallbacks or for corroboration purposes. As such, the robustness of our €STR based Term Rates will not depend on having access to 100% of OIS quotes.

   In terms of access to transactions data our relevant platforms capture OIS transactions from 100+ banks and 2,500+ buy side participants. We are therefore confident we already capture most material OIS transactions in the market.

6. *What do you expect to be the frequency of publication?*

   Daily, on ECB business days (Monday to Friday), at 9am CET.

7. *Please share the sort of engagement from market makers that you think will be necessary for the benchmark to work. Is there any specific formal contract that market makers will have to sign? Do you foresee any issues with this point?*
   As explained above the calculation of IHS Markit's €STR based Term Rates will be fully transaction-based in most cases. Quotes for spot starting €STR OIS will only be relevant for calculation as fallbacks or for corroboration as defined in the 6-level waterfall.
   As such we do not see any strong need for market maker agreements. In any case, we believe that market maker agreements would need to be established by the relevant trading venues, rather than by the Benchmark Administrator. Further, if market maker agreements were established by the relevant trading venues, we assume they would work to the benefit of all recipients of quotes.

8. *We have seen that in recent stress periods quotes in OIS markets virtually dried-up. How do you expect to deal with similar periods of market stress?*

   Based on experience, total actual transaction volumes tend to hold up well or might even increase during periods of high volatility and market stress, whilst the preferred mode of trading might move away from screens and to the phone in these situations. We have back-tested our methodology for the last 2 years and found that it produced fully transaction-based €STR based Term Rates for 100% of the days for all tenors (1,2,3,4,5 and 6-month tenors).

In contrast, experience has also shown that the amount of screen-based trading, including order books and streamed quotes, tends to fall in times of market stress. It is therefore likely that a smaller amount of quotes / orders would be available in those circumstances. As stated above, our methodology uses quotes only on lower level of the calculation of the waterfall and would hence not be impacted as long as a sufficient number of transactions was available.

We have built our 6-level waterfall to also consider market disruption that eliminates or reduces availability of input data. Consequently, the lower levels of the waterfall contain various fallbacks that rely on analytical methods such as interpolation and extrapolation if neither a sufficient number of transactions nor quotes input data were available for whatever reason.

9. *The fallback will need to be calculated for an indefinite period of time since it will be written in very long-term contracts. What is your plan to ensure long-term production of the benchmark?*

   The index and Benchmark businesses are a key part of IHS Markit's financial services offering and have been for many years. With many hundreds of employees in this business and significant revenue attached, there is little doubt that we will maintain this business in the long term.

10. *Do you plan to charge users for using the benchmark?*
    We are planning to licence the €STR based Term Rates to market participants on fair and reasonable, non-discriminatory terms. Actual charges will depend both on the type and the extent of use.

**List of meeting participants**

| Participant's organisation | Name of participant |
|---|---|
| **Chair** | Mr Steven van Rijswijk |
| ING | Ms Marjolein de Jong-Knol |
| **Voting members** | |
| Bank of Ireland | Mr Barry Moran |
| Barclays | Mr Joseph McQuade |
| Barclays | Mr Andreas Giannopoulos |
| Bayerische Landesbank | Mr Harald Endres |
| BBVA | Mr José Carlos Pardo |
| BBVA | Mr Fernando Soriano Palacios |
| BNP Paribas | Mr Patrick Chauvet |
| BNP Paribas | Mr David Gorans |
| BPCE/Natixis | Mr Olivier Hubert |
| CaixaBank, S.A. | Mr Juan Cebrián |
| CaixaBank, S.A. | Mr Sergio Castellá Quintana |
| Crédit Agricole | Mr Carlos Molinas |
| Deutsche Bank | Mr Jürgen Sklarczyk |
| DZ Bank | Ms Cornelia Gericke |
| DZ Bank | Mr Michael Schneider |
| Erste Group Bank AG | Mr Neil Mcleod |
| Eurobank-Ergasias SA | Mr Theodoros Stamatiou |
| HSBC | Mr Pierre Jenft |
| HSBC | Ms Nathalie Gay-Guggenheim |
| ING Bank | Mr Jaap Kes |
| Intesa Sanpaolo | Ms Maria Cristina Lege |
| KfW Bankengruppe | Mr Markus Schmidtchen |
| KfW Bankengruppe | Mr Ingo Ostermann |
| LBBW | Mr Jan Misch |
| Santander | Ms María Teresa Bermúdez Tejero |
| Santander | Mr Oscar García Maceiras |
| Santander | Mr Carlos Infesta |
| Société Générale | Mr Olivier Balpe |
| Société Générale | Mr Stephane Cuny |
| UniCredit Bank | Mr Alberto Covin[6] |

[6] Recused for Item 5 of the agenda.

**Non-voting members**

| | |
|---|---|
| European Money Markets Institute | Mr Jean-Louis Schirmann[7] |
| European Money Markets Institute | Ms Petra De Deyne[7] |
| European Fund and Asset Management Association | Ms Agathi Pafili |
| International Capital Market Association | Mr David Hiscock |
| International Swaps and Derivatives Association | Mr Rick Sandilands |
| International Swaps and Derivatives Association | Mr Graham Bryant |
| Loan Market Association | Ms Kam Mahil |

**Invited institution**

| | |
|---|---|
| European Investment Bank | Mr Yassine Boudghene |
| European Investment Bank | Mr Thomas Schröder |
| Generali | Ms Anna Kozhevnikova |

**Additional invited institutions (specific to Item 5)**

| | |
|---|---|
| Clifford Chance | Mr Alex Nourry |
| ICE Benchmark Administration | Mr Timothy Bowler |
| ICE Benchmark Administration | Mr Stelios Tselikas |
| London Stock Exchange Group | Mr Julien Jardelot |
| London Stock Exchange Group | Mr Douglas Bourne |
| London Stock Exchange Group | Mr Scott Harman |
| Refinitiv | Mr Stephan Flagel |

**Observers**

| | |
|---|---|
| European Central Bank | Ms Cornelia Holthausen |
| European Central Bank | Mr Holger Neuhaus |
| European Securities and Markets Authority | Mr Michele Mazzoni |
| Financial Services and Markets Authority | Mr Ward Van Rie |
| European Commission | Mr Tilman Lueder |

**Secretariat**

| | |
|---|---|
| European Central Bank | Ms Stephanie Broks |
| European Central Bank | Mr Mikael Stenström |
| European Central Bank | Mr Pascal Nicoloso |
| European Central Bank | Mr Armin Greif |
| European Central Bank | Ms Yasmina Santalla Pérez |
| European Central Bank | Mr Vladimir Tsonchev |
| European Central Bank | Mr William Lelieveldt |

[7] Recused for Item 5 of the agenda.