Executive summary of the 12 November 2019 meeting of the National Working Group on Swiss Franc Reference Rates

The National Working Group on Swiss Franc Reference Rates (NWG) met on 12 November 2019 to discuss current challenges in respect of the LIBOR transition in Switzerland and relevant international developments.

The key items of yesterday’s meeting were:

(i) The Secretariat of the Competition Commission (COMCO) provided their assessment on the compatibility of a greater standardization of SARON-based credit products according to Art. 23 para. 2 Cartel Act.¹ The Secretariat of the COMCO assumed for its advice that a recommendation of the NWG for a greater standardization of SARON-based credit products could constitute an unlawful agreement within the meaning of Art. 4 para. 1 in conjunction with Art. 5 paras. 1 and 3 Cartel Act. The Secretariat concluded² that even if a recommendation would, indeed, constitute an unlawful agreement, it could be justified for reasons of economic efficiency according to Art. 5 para. 2 Cartel Act:

a. In the case of syndicated loans, a recommendation towards a restriction to one or more options can be justified on the grounds of economic efficiency.

b. In the case of credit products for retail customers, a recommendation for a restriction must comprise at least three processing options and include at least one from the group "in advance" and one from the group "in arrears”.

¹ At the last meeting, participants were informed that the two co-chairs consulted the Secretariat of the COMCO in order to get an assessment which level of granularity of the NWG recommendations remains in compliance with competition rules.

² Disclaimer: Opinions of the Secretariat of the COMCO according to Art. 23 para. 2 Cartel Act are not binding for the COMCO. For any enquiries regarding this opinion of the COMCO Secretariat, please contact Olivier Schaller, Vice-Director of the COMCO Secretariat at olivier.schaller@weko.admin.ch.
c. In the case of floating rate notes, the required synchronicity with the derivatives market justifies a recommendation towards a restriction to one option on the grounds of economic efficiency.3

(ii) Based on the COMCO assessment, the NWG agreed to provide further guidance on the options for using compounded SARON. Discussions on a national and international level on loan options are centered around the in arrears options “plain” and “lookback” and the in advance option “last reset”. These preferences may vary across client segments and currencies. The NWG therefore recommended to financial institutions to finalize their product strategy and take into account the further guidance provided. However, further work will be conducted on the feasibility of options using compounded SARON in syndicated lending, including liaising with international working groups to align loan market conventions where beneficial.

(iii) Furthermore, meeting participants discussed the necessity of a user-friendly calculator for compounded SARON, the conventions for compounded SARON on non-business days, a flooring methodology and legal aspects concerning EU law.

(iv) Another key item was the discussion on how to transition the legacy book. An assessment on two strategies, i.e. unwinding the legacy book or relying on fallbacks, was presented. For the approach that relies on fallbacks, an assessment of the use of a pre-cessations trigger was presented. Furthermore, the International Securities and Derivatives Association (ISDA) gave an update on their fallback consultations and the Swiss Bankers Association presented the envisaged approach to amend the Swiss Masters Agreement.

(v) A new caps (floors) template as well as an updated SARON swap confirmation were presented. The Derivatives and Capital Market sub-working group also gave an update on the work conducted by an international working group on conventions for cross currency basis swaps.

(vi) Lastly, the discussion focused on accounting and regulatory implications regarding the LIBOR transition. This included an update on the implications for hedge accounting and the impact of the IBOR transition on insurance solvency models.

The NWG members agreed on the following main recommendations:

- Institutions should individually define their product strategy given the guidance on options using compounded SARON.
- Index providers (e.g. SIX) are invited to implement a user friendly and free-to-use calculator for compounded SARON.

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3 The NWG published a discussion paper on SARON Floating Rate Notes. Based on the paper’s assessment, the advantages of the option “lookback” outweigh its small economic drawbacks.
• Market participants are free to decide whether a floor is applied and at which level this floor is applied. If a floor is part of the contract and the notional is constant, it should be applied to compounded SARON and not on each individual SARON rate.

• Local law determines whether periodical instead of in-advance notice is possible. Market participants should assess compliance of an «in arrears» structure with the local law.

• Market participants should liaise (individually or in user-groups) with their infrastructure providers in order to be ready for SARON-products. Infrastructure providers should further work on the implementation.

• Market participants should transition CHF LIBOR exposures prior to end of 2021 wherever possible. Moreover, they should align fallback language to the chosen strategy and in particular consider the usage of a pre-cessation trigger.

• Insurance companies and regulators should identify the impacted areas in solvency and actuarial models affected by the IBOR transition and prepare accordingly.

• Publication of the following documents:
  o Caps (floors) template
  o Updated SARON swap confirmation

The minutes of the meeting will be published in due course on the NWG website.4

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4 The NWG is the key forum to foster the transition to SARON and to discuss the latest international developments. The NWG ceases to exist once the transition to SARON is materially completed. The NWG is co-chaired by a representative of the private sector and a representative of the Swiss National Bank (SNB). The SNB supports the NWG by co-chairing the working group alongside a representative from the private sector. The NWG publishes recommendations based on consensus. Recommendations are not legally binding. The SNB abstains from voting and acts primarily as a moderator. Furthermore, the SNB runs the NWG’s technical secretariat and facilitates the organisation of the meetings. In this capacity, the SNB also publishes on its webpage documents discussed by the NWG such as this document. The items published do not necessarily reflect the views of the SNB.
Minutes of the 12 November 2019 meeting of the National Working Group on Swiss Franc Reference Rates

1. Introduction

- The two co-chairs of the National Working Group on CHF Reference Rates (NWG) welcomed all attendees to the twenty-third meeting and reminded them of their responsibilities related to competition law and confidentiality.

- Additionally, meeting participants received information on the recent upward pressure on Swiss Franc money market rates due to the rise in the SNB’s exemption threshold which became effective on 1 November 2019. SARON and CHF 3-month LIBOR increased by several basis points at the beginning of November, but have been reverting since then. While it is the case that overnight rates are inherently more volatile than term rates on a day-to-day basis, it is important to remember that in contracts running for multi-month or multi-year periods and referencing overnight rates interest is paid based on averages of these daily rates. The 3-month compounded SARON, for example, only increased by roughly 1 basis point. However, if the increase in the overnight rates were to persist over time, the compounded rate will eventually increase to a more elevated level as well. It is expected that SARON will revert back towards the SNB policy rate.

2. Term rates

2.1. International update

- Meeting participants were briefed about the latest developments of international term rate initiatives. The €STR and the adjusted EONIA, which is now €STR plus a spread, were first published on 2 October 2019.

- For all LIBOR currencies the alternative overnight risk-free rates (RFR) are available and all working groups share the view that these RFRs can be used for new cash products, derivatives and as a fallback rate for LIBOR-based products. While RFR based derivatives markets are already existing, cash markets are still in their infancy. The first SARON based mortgages are expected to be launched in 2020.

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1 See slide 7.
2.2. **Using compounded SARON**

- The two co-chairs informed NWG members at the June meeting that they consulted the Secretariat of the Swiss Competition Commission (COMCO) to assess whether a recommendation for a reduced number of options is compliant with competition rules. Members of the Secretariat of the COMCO joined this meeting and presented the Secretariat’s opinion. They concluded that the following recommendations can be justified on grounds of economic efficiency (Art. 5 para. 2 Cartel Act):
  
  o Retail loans (e.g. mortgages): The standardization should not anticipate consumer preferences whether the interest rate needs to be known in advance or at the end of the interest period. Hence, the recommended options for retail loans should include at least one option from the group “in arrears” and one option from the group “in advance”. In total, at least three options should be recommended.
  
  o In the case of syndicated loans, recommending a restriction to one or more options can be justified.
  
  o In the case of floating rate notes, the required synchronicity with the derivatives market justifies a recommendation towards a restriction to one option.

- NWG members were informed about the tendencies regarding the options using a compounded SARON for retail loans. Discussions at both national and international level on loan options are currently centered around options 0) “Plain”, 3) “Lookback” and 4) “Last Reset”.

  o **In-arrears options**: For loans based on RFRs published with a one day delay (e.g. €STR or SONIA) option 3) “Lookback” is more viable as the processing of interest payments usually starts at least one day in advance of the actual payment date. For SARON-based loans, option 0) “Plain” could be possible because SARB is calculated and published on the same day (at 6 p.m.), thus the last daily rate for a compounded rate is known one day prior to the interest payment date. Furthermore, for loans where processing the interest payment can be done internally rather than by transferring funds through a payment system, option 0) “Plain” might be preferable. E.g. for mortgages, the borrower is usually required to have an account at the lending bank. If option 0) "Plain" is not feasible due to operational hurdles, option 3) "Lookback" should be considered. Option 1) “Payment Delay” is not favored by corporate clients, as it implies two separate cash flows at the end of the contract.

  o **In-advance options**: The focus is clearly on option 4) “Last Reset”. The recent upward pressure in SARB and more notably the SOFR spikes in mid-September are a clear argument against option 5) “Last Recent”. Option 6) “Interest Rollover” has

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2 See slide 14.
3 See slides 9 ff and the executive summary in the appendix. The views expressed in the consultation are based on the facts and information provided to the Secretariat. The views expressed by the Secretariat are not binding for the COMCO. For any enquiries regarding this opinion of the COMCO Secretariat, please contact Olivier Schaller, Vice-Director of the COMCO Secretariat at olivier.schaller@weko.admin.ch.
4 For a detailed assessment of each option please also see the NWG Slides from February 2019.
similar disadvantages as option 1). Institutions should individually define their product strategy given the guidance on options using compounded SARON.

- Regarding **SARON floating rate notes**, the assessment provided by the Secretariat of COMCO allows to firm up the preference expressed by the NWG last June to use option 3) “Lookback” for to become the recommended option.

- NWG members were informed about the different measures that were taken or are under consideration to increase the visibility and accessibility of compounded SARON. These include:

  o Formula for compounding: Compounded SARON can be calculated by using the standard formula for compounding and the daily SARON rates for the desired period.\(^5\)

  o **SAION**: The Swiss Average Index Overnight can be used to easily and precisely calculate the compounded SARON for a desired period (if the start- and end-dates are business days).\(^6\) SAION is published daily alongside with SARON by SIX.

  o Calculation matrix: The calculation matrix available on the SIX website provides pre-calculated compounded SARON for any given interest period in the last 12 months.

  o Calculator: The compounded calculator is a user interface that requires a start- and end-date in order to determine the compounded rate for this specified interest period. At this point it only exists in the form of a spreadsheet on the SIX website. Index providers (e.g. SIX) are invited to implement a web-based user friendly and free-to-use calculator for compounded SARON. Meeting participants agreed that there would be much added value in such a web-based calculator.

  o Compounded indices: Compounded indices are unique fixings per business day for specific tenors. As such they would be suitable for publication to a broad audience, e.g. in the media. Currently, only sample data are available for these indices.

- A representative of SIX updated the NWG members about SARON and the EU benchmark regulation (EU BMR):

  o The application for an endorsement of the SIX Indices under the EU BMR was handed in. SARON, SAION, “SARON 1, 3, 6 months Compound Indices” are part of the application. An approval is not expected before Q1 2020.

  o The EU and ESMA have announced to prolong the transition period for 3rd country indices until the end of 2021.

  o SIX has created a [webpage](#) to inform about the regulatory topics affecting its indices.

- The following updates were given concerning the current work of the Index Commission for Swiss Franc Reference Rates:

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\(^5\) See slide 61.

\(^6\) See slide 64.
- The methodology for “SARON 1, 3, 6 months Compound Indices” was discussed in a recent meeting.
- The explanatory document for the “SARON 1, 3, 6 months Compound Indices” was shared with the Index Commission.
- SIX has collected feedback and is in contact with members of the NWG sub-working groups for the design of the Saron compounded indices.

- In addition, SIX informed the meeting participants about the licensing model of Saron. According to SIX, they intend to establish a pragmatic licensing model with limited administrative impact following existing practices. The pricing will be competitive compared to industry standards. SIX has reached out to several banks to explain and verify the current licensing approach and clarify the use-cases. Banks are invited to contact SIX in case they have questions. SIX intends to publish a FAQ with clear and comprehensive explanation for the terms & conditions.

- Meeting participants were informed about the modified standard formula that should be used to calculate compounded Saron for non-business days. The calculator for compounded Saron should incorporate this modified standard formula.7

- Meeting participants discussed how a floor should be applied to compounded Saron. The conclusion was as follow:
  - Market participants are free to decide whether a floor is applied and at which numerical level this floor is applied.
  - If a floor is part of the contract and the notional is constant, it should be applied to compounded Saron and not on respective individual Saron observations.

- Meeting participants discussed EU consumer protection aspects in the Credit Mortgage Directive 2014/17/EU. The directive states that member states shall ensure that the creditor informs the consumer of any change in the borrowing rate before the change takes effect. However, the member states may allow parties to agree in the credit agreement that the information is to be given to the consumer periodically where the changes in the borrowing rate are correlated with a change in the reference rate. As the directive is implemented in local law, which then is relevant to determine whether an in-arrears calculation is possible, market participants should assess such local law to determine the compliance of an in-arrears structure. In the case of German law, for instance, there seems to be no issue. One NWG member institution with knowledge of the legal situation in Austria declared that they would suggest an in-advance option, as in-arrears options might not be compliant with Austrian law. There is no Swiss regulation prohibiting the usage of any of the proposed in-arrears or in-advance options.

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7 See slide 20 and 62.
3. LIBOR fallback language and legacy book transition

- Meeting participants were given an overview of different transition scenarios and strategies. The challenge lies in the uncertainty regarding the transition. The discontinuation of CHF LIBOR after 2021 is very likely. However, the exact timing and sequence of the cessation are unclear. Moreover, the EU Benchmark Regulation (EU BMR) allows the regulator to declare a benchmark as “non-representative”, which would prohibit the usage by EU supervised entities for new contracts. The two transition strategies are to either unwind LIBOR exposure now or to rely on fallbacks. The NWG recommends that market participants should transition their LIBOR exposure prior to end 2021 wherever possible and align fallback language to the chosen transition strategy. In particular, market participants should consider the potential usage of a pre-cessation trigger. Both strategies entail a number of advantages and disadvantages that are described on slides 28-29 of the presentation.

- Meeting participants also discussed the current views and challenges with a pre-cessation trigger for cash and derivative products. As stated, non-compliant benchmarks cannot be used in the EU for new contracts. FCA or IBA have to assess LIBOR’s BMR compliance each time a panel bank intends to leave. Without a pre-cessation trigger, legacy contracts will continue to reference LIBOR and a split of the market across jurisdictions, between cash and derivatives products and between centrally cleared and non-centrally cleared transactions would occur. In addition, legacy contracts will become difficult to unwind or hedge and market participants would be forced to use a non-representative LIBOR which might be more volatile due to fewer panel banks. Consequently, a number of parties and working groups, such as the ARRC and the OSSG, favor the inclusion of a pre-cessation trigger.

- A representative of ISDA reported on the recent consultations. These include:
  - Supplemental Consultation on Spread and Term Adjustments for Fallbacks in Derivatives Referencing USD LIBOR, CDOR and HIBOR and Certain Aspects of Fallbacks for Derivatives Referencing SOR
  - Consultation on Pre-Cessation Issues for LIBOR and Certain Other IBOR
  - Consultation on final parameters

- The Supplemental Consultation on Spread and Term Adjustments built on the July 2018 Consultation on Spread and Term Adjustments for Fallbacks in Derivatives Referencing GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR and BBSW. It asked for input on the approach for addressing certain issues associated with adjustments that will apply to RFRs if the fallbacks take effect. ISDA received feedback from 85 entities. Consistent with the 2018 consultation, the overwhelming majority of respondents preferred the “compounded setting in arrears rate” for the adjusted RFR and the “historical mean/median approach” for the spread adjustment.

- The Consultation on Pre-Cessation Issues asked for input on the preferred approach for addressing pre-cessation issues in derivatives that reference LIBOR and certain other IBORs.
that are critical benchmarks within the meaning of the EU BMR, including in the context of a regulator’s statement that the relevant IBOR is no longer representative. ISDA received responses from 89 entities. Respondents expressed a wide variety of views regarding whether and how to implement a pre-cessation trigger related to “non-representativeness” for derivatives. In general, the respondents fell into three categories, without a clear majority in any one category:

- Those who supported adding a pre-cessation trigger to the permanent cessation triggers in the “hard wired” amendment to the 2006 ISDA Definitions and related protocol.
- Those who supported use of the pre-cessation trigger provided that it was implemented with optionality and flexibility (or indicated that their support for the trigger depended on a number of factors).
- Those who opposed the pre-cessation trigger.

- ISDA published a report that summarizes the responses to the pre-cessation issues. ISDA will continue to seek advice from its independent advisors and feedback from government and regulatory agencies. Overall, there is a tendency to include a pre-cessation trigger but it is yet unclear how to implement it.\(^8\)

- The Consultation on final parameters sought input on parameters related to the compounded setting in arrears rates and historical mean/median approach to calculate the spread adjustment. The consultation closed on 23 October 2019.\(^9\)

- ISDA plans to finalize the amended definitions and protocol for all covered IBORs by December 2019. The publication of the amended definitions and protocol for all covered IBORs (including EUR LIBOR and EURIBOR if results of supplemental consultation are consistent with results of consultations for other IBORs) is scheduled for February 2020 (with effective date approximately 3 months later).

- The meeting participants were informed about the upcoming IBOR annex for the Swiss Master Agreement (SMA). With regard to the cessation of LIBOR, the AG OTC, which is a working group consisting of legal counsels from 10 banks, hosted by the Swiss Bankers Association (SBA), has agreed to follow the international approach of ISDA and therefore to draft an IBOR annex with the same triggers as ISDA for replacement of IBORs, the same RFRs as ISDA as Primary Fallback Rates and to apply the same methodologies as ISDA for Term Adjustments and Spread Adjustments. The AG OTC expects ISDA to finalize its IBOR documentation in the first quarter of 2020, following such publication the IBOR annex ought to be drafted and finalized in the first half of 2020 after being discussed in the AG OTC. Such IBOR Annex shall reproduce the ISDA documentation.

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8 Addendum: On 15 November 2019, the OSSG asked ISDA to take forward the option of a pre-cessation trigger without embedded optionality. See here.

9 Addendum: On 15 November 2019, ISDA published a report that summarizes responses to a consultation on the final parameters of adjustments that will apply to derivatives fallbacks for certain IBORs. Responses to the final parameters consultation show that a majority of participants preferred a historical median approach over a five-year lookback period. A majority also preferred not to include a transitional period in the spread adjustment calculation, not to exclude outliers, and not to exclude any negative spreads. For the compounded setting in arrears rate, a clear majority favored a two-banking-day backward shift adjustment for operational and payment purposes.
4. SARON-based derivatives

- NWG members were informed about a new template for a caps (floors) confirmation that references the CHF-SARON-OIS-COMPOUND for the relevant interest rate period(s) instead of directly referencing each SARON fixing. Furthermore, meeting participants were informed that the draft template for the SARON swap confirmation was slightly amended to reference the CHF-SARON-OIS-COMPOUND. The new template as well as the amended template will be published together with the minutes of the meeting.

- NWG representatives participated in the international working group led by the ARRC (“Market Structure Working Group of the ARRC”), striving to align market conventions in the interdealer cross currency market. To limit credit risk it was deemed prudent to align payment dates of principal between currency pairs. It is not always possible to align principal payments, interest payments and interest observation periods between currency pairs. For USD/CHF cross currency basis swaps, market participants should consider option 1) “Payment Delay”.

- It was further confirmed that there are no indications that the transition to RFR has an impact on market participants’ ability to transact FX swaps.

5. Effects on financial reporting and regulation

- First, NWG members were provided with an assessment of the open issues with respect to the effects on financial reporting. Under the accounting regimes issued by IASB and FASB, entities can now assume that hedged cash flows, hedged items, hedged risks, and corresponding hedging instruments are not altered as a result of the reform although the critical terms of these hedging relationships have changed (i.e. the interest rate). Thus, there is no de-designation of hedge accounting and no related P/L volatility.

- Second, the D&C sub-working group elaborated on the potential effects of IBOR transition on insurance solvency models. The discontinuation of IBORs in their current form at the end of 2021 should trigger a review of the applicable interest rate curves. If the regulators make no adjustments, solvency ratios of insurers are expected to be impacted. More clarity is required on:
  - The definition of new reference rates on which solvency model risk-free term structures are based on.
  - The potential adjustments to the risk-free interest rate term structures.
  - The timeline of the transition.

- The steps taken so far include:
  - The working group on Sterling Risk-Free Reference Rates has sent an open letter to EIOPA encouraging them to actively remove the recognized Solvency II barriers to transition.
  - A summary of open issues was sent to the FSB OSSG Subgroup and FINMA.
o The topic of IBOR-transition and its impact on insurance solvency has been added to the agenda of the meetings of the technical commission of the SVV (Schweizerischer Versicherungsverband). The first meeting took place on 5 September 2019.

- Insurance companies and regulators should identify impacted areas in solvency and actuarial models affected by the IBOR transition and prepare accordingly.

6. **Recommendations**

- Institutions should individually define their product strategy given the guidance on options using compounded SARON.
- Index providers (e.g. SIX) are invited to implement a user friendly and free-to-use calculator for compounded SARON.
- To calculate compounded SARON on non-business days, the modified standard formula should be used. The calculator for compounded SARON (but not e.g. SAION or SAR3MC) should use the modified standard formula.
- Market participants are free to decide whether a floor is applied and at which numerical level this floor is applied. If a floor is part of the contract and the notional is constant, it should be applied to compounded SARON and not on respective individual Saron observations.
- Market participants should liaise (individually or in user-groups) with their infrastructure providers in order to be ready for Saron-products. Infrastructure providers should further work on the implementation.
- Local law determines whether periodical instead of in-advance notice of interest rates is possible. Market participants should assess compliance of an «in arrears» structure with the local law.
- Transition CHF LIBOR exposures prior to end of 2021 wherever possible.
- Align fallback language to the chosen transition strategy. In particular, consider the potential usage of a pre-cessation trigger.
- Publication of the caps (floors) confirmation and the amended Saron swap confirmation by the NWG Secretariat.
- Consider «Payment Delay» for USD/CHF CCBS for the interdealer market.
- Insurance companies and regulators should identify the impacted areas in solvency and actuarial models affected by the IBOR transition and prepare accordingly.

7. **Next steps / next meeting**

- NWG sub-working groups to continue to liaise with other international working groups to align and coordinate efforts, in particular in areas where alignment is beneficial.
Monitor and foster national and international developments regarding implementation and/or usage of compounded term rates in cash products and the adoption of SARON in derivatives markets.

L&D sub-working group to continue to consider feasibility of options for using compounded RFR in syndicated lending and discuss contractual robustness.

Liaise with infrastructure providers to foster the implementation of the NWG’s recommendations.

The next NWG meeting is scheduled for Wednesday, 8 April 2020, 15:00 - 17:00. Personal attendance is highly appreciated, but it will also be possible to dial in by phone.
Attendance at the 12 November 2019 meeting

Martin Bardenhewer – Zürcher Kantonalbank, co-chair
Marcel Zimmermann – Swiss National Bank, official sector representative, co-chair

Pascal Anderegg – ZKB
Hans Ulrich Bacher – Entris
Christian Bahr – SIX
Markus Bieri – Swiss ACT / LafargeHolcim
Marie-Anne Bourgoz Gorgé – BCGE (by phone)
Zoran Celeketic – UniCredit SpA
Christophe Cherdel – BCV
Alberto Covin – UniCredit SpA (by phone)
Thomas Damagnez – CA Indosuez (by phone)
Guillermo De La Fuente – ACTSR / SITA (by phone)
Michael De Vegvar – Leonteq
Patrick Deschwanden – CIC (by phone)
Robert Eigenheer – Eurofima
Markus Engeli – Zurich (by phone)
Michel Erni – BKB (by phone)
Fernando Fasciati – Raiffeisen
Kevin Ferrier – CA Indosuez (by phone)
Juergen Frank – UniCredit SpA (by phone)
Jutta Frey-Hartenberger – Eurex (by phone)
Fernando Gardoni – SGKB
Christian Gerber – AXA Winterthur
Nicolas Graafen – SIF (by phone)
Thomas Graf – Valiant (by phone)
Angus Graham – UBS (by phone)
Stéphane Hegi – BCV (by phone)
David Horner – LCH (by phone)
Christian Horváth – UniCredit SpA (by phone)
Jenny Ileva – Eurex (by phone)
Frank Kilchenmann – Swiss Bankers Association
Thomas Kolb – SBB
Rolf Konrad – Bank Cler
Marcus Kriendhofer – UniCredit Bank Austria (by phone)
Sebastian Krist – Raiffeisen
Stefan Kurt – FINMA
Jean-Luc Kyburz – UBS
Colt-Spenser Lake – UBS
Alfred Ledermann – UBS (Chair L&D sub-working group)
Nicolas Lergier – GKB (by phone)
Ernst Lienhard – SwissRe
Kam Mahil – LMA (by phone)
Bruno Marin – BNP Paribas
Jonathan Martin – ISDA
Davide Masi – Eurex (by phone)
Elizabeth McGowan – Wells Fargo (by phone)
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<td>Neil McLeod</td>
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<td>Swiss Competition Commission (COMCO)</td>
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Appendix

Assessment by the Secretariat of the Competition Commission (from here on only “Secretariat”) regarding possible competition law implications of a reduced list of recommended options for using compounded SARON

- In its meeting on 5 February 2019, NWG proposed seven possible and detailed options for embedding a SARON-based reference interest rate in credit agreements.
- In a letter dated 28 May 2019, the NWG contacted the Secretariat in order to find out the possible competition law implications of a reduced list of recommended options for using compounded SARON. The present consultation covers only the technical processing of SARON-based credit products and not the calculation mechanism of the SARON rate.
- Potential anticompetitive agreements pursuant to Art. 4 (1) Cartel Act, except for syndicated loans, may exist during the coordination between NWG participants regarding the processing standard of SARON based credit products. These potential anticompetitive agreements may be justified for reasons of economic efficiency (Art. 5 (2) Cartel Act).
- The Secretariat based on its assessment of the credit products concerned has come to the following conclusions:
  - In the case of SARON-based credit products for retail customers, the Secretariat takes the view that these agreements may be justified under antitrust law if at least three options out of the seven options remain in the final recommendation.
  - Of these three recommended options for retail loans, the Secretariat believes that at least one option should be from the subgroup "in arrears" and at least one from the subgroup "in advance". In the Secretariat's view, this ensures that customers’ preferences should not be anticipated by the NWG. Customers remain free to decide if they prefer knowing the amount of the next interest payment at the conclusion of the contract or after a few months. As a result, a recommendation in favour of a restriction to three variants is permissible under antitrust law as long as both basic forms "in advance" and "in arrears" are included.
  - Assuming that the buyer-side of syndicated loans has strong negotiating power vis-à-vis the lead banks and that the syndicated loan agreements are negotiated individually and among equally well-informed market participants, a recommendation in favour of a restriction of the settlement variants would not, in the Secretariat's view, lead to a significant restriction of the options available to the buyers of syndicated loans.
  - In the case of syndicated loans and according to the present assessment of the Secretariat it is questionable whether a recommendation to restrict the settlement options is at all suitable to "have as its object" or "effect" a restriction of competition pursuant to Art. 4 (1) of the Cartel Act, since the settlement standard plays a rather subordinated role in the negotiation of the syndicated loan terms and only becomes significant in the subsequent phase of the settlement of the syndicated loan. Thus, in the case of a recommendation in favor of restriction of options for using compounded
SARON to one or more options for syndicated loans, the associated antitrust risks are rather low.

- Even under the unlikely assumption that the settlement variant would have an influence on the competitive situation in the syndicated loan market and that the settlement variant would thus represent a relevant competitive parameter, the Secretariat believes that a recommendation to restrict the settlement standards to one variant can be justified for reasons of economic efficiency, at least for those syndicated loans that have issued credit lines in several currencies. From the point of view of the mostly listed borrowers and the internationally active banking institutions, it is important that the individual "legs" do not have different settlement standards, as the price parameters in the offer phase are agreed and negotiated separately for each currency. This ensures that settlement and coordination difficulties between the banks are avoided as soon as the credit limits have been granted and interest payments have to be forwarded within the bank syndicate.

- As a result, the Secretariat concludes that, under the above-mentioned conditions, a recommendation to restrict the options for using compounded SARON for syndicated loans to only one option seems unproblematic under antitrust law.

- For floating rate notes, the Secretariat's assessment suggests that a recommendation for a narrowing of the options could be justified in the sense of more rational use of resources and improvement of products and production processes (Art. 5 para. 2 Cartel Act), as compatibility with the hedging instruments available on the market plays an important role in the case of floating rate notes from the point of view of investors and issuers. As a result, it can be stated that a recommendation to restrict the options for using compounded SARON for floating rate notes to one option is permissible under antitrust law.

- Concerning agreements on different levels of the production and distribution chain, the Secretariat's assessment suggests that a coordination between infrastructure provider and credit provider - insofar as it does not go beyond a contractual relationship - could be permissible under competition law, as long as it does not lead to an allocation of territory or to an agreement on minimum and fixed prices (Art. 5 para. 4 Cartel Act).
National Working Group on CHF Reference Rates

23rd Meeting, 12 November 2019

This version is as of 13 November 2019.

The slide set was slightly revised based on the discussion during the NWG meeting.
Agenda

1. Opening remarks
2. Term rates
   2.1. International update
   2.2. Using compounded SARON
3. LIBOR fallback language and legacy book transition
4. SARON-based derivatives
5. Effects on financial reporting and regulation
6. Recommendations
7. Next steps
Recent upward pressure on CHF money market rates due to the rise in the exemption threshold.

### SARON and LIBOR rates

- **SARON**
- **SARON compounded 3M**
- **CHF 3M LIBOR**

![Graph showing SARON and LIBOR rates from April 19 to November 19, highlighting the rates as of 11.11.19: -0.6744, -0.7084, and -0.7268分别是4月到11月的利率。]
2. Term rates
Topics

- International update
- Using compounded SARON
  - Consultation result on the standardization of SARON-based products by the Competition Commission (WEKO)
  - Further guidance on options using compounded SARON
  - Visibility of compounded SARON
- SARON under EU Benchmark Regulation and licensing – update from SIX
- Compounded SARON on Non-Business Days
- Floored compounded SARON
- Update on EU consumer protection
2.1. International update
## Overview of term rate initiatives

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Alternative reference rate</td>
<td>SOFR (Secured Overnight Financing Rate)</td>
<td>SONIA (Sterling Overnight Interbank Average Rate)</td>
<td>€STR (Euro-Short Term Rate) since 2. Oct. 2019 / EURIBOR</td>
<td>TONA (Tokyo Overnight Average Rate) / TIBOR</td>
<td>SARON (Swiss Average Rate Overnight)</td>
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<td>Fixing</td>
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<td>T+1, 9:00 GMT</td>
<td>T+1, 8:00 CET (€STR) T+0, 11:00 CET (EURIBOR)</td>
<td>T+1, 10:00 JST (TONA) T+0, 13:00 JST (TIBOR)</td>
<td>T+0, 18:00 CET</td>
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</table>

### Usage of RFR

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Alternate Reference Rates Committee</th>
<th>WG on Sterling Risk-Free Reference Rates</th>
<th>WG on Euro Risk-Free Rates</th>
<th>Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks</th>
<th>National Working Group on CHF Reference Rates</th>
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</thead>
<tbody>
<tr>
<td>Current Status</td>
<td>Used for FRN and for derivatives</td>
<td>Used for derivatives</td>
<td>Used for derivatives; mortgages expected 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability</td>
<td>Not expected before end-2021</td>
<td>Preliminary data expected to be available in Q1 2020</td>
<td>No release date known yet</td>
<td>Expected to be available by around mid-2021</td>
<td>Not recommended</td>
</tr>
<tr>
<td>Based on</td>
<td>Likely based on Futures or OIS</td>
<td>Likely based on Futures or OIS</td>
<td>Likely based on OIS</td>
<td>Likely based on OIS*</td>
<td>For some cash products for which it is deemed appropriate to use forward-looking term rates for transition and as a fallback rate</td>
</tr>
<tr>
<td>Purpose</td>
<td>For some cash products which cannot use backward-looking term rates and as a fallback-rate for IBOR-based products</td>
<td></td>
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</tbody>
</table>

* In light of the need confirmed by the Committee in Japan for term reference rates based on futures, the Tokyo Financial Exchange is considering to relaunch trading of Over-Night Call Rate Futures in around 2020.
2.2. Using compounded SARON
Consultation of the COMCO Secretariat on „Standardization of SARON-based credit products“

(according to Art. 23 para. 2 Cartel Act)

Zurich, November 12th, 2019

Disclaimer: The views expressed in this presentation are based on the facts and information provided to the Secretariat. The views expressed by the Secretariat are not binding for the Competition Commission (COMCO).
**Framework of the Secretariat’ Opinion**

- **Interpretation of Art. 4 and 5 Cartel Act («CA»)**
  - Assumption of the Secretariat: a NWG-recommendation re Standardization of SARON-based credit products could be an unlawful agreement affecting competition within the meaning of Art. 4 para. 1 in conjunction with Art. 5 paras. 1 and 3 CA

- **However**, such agreement may be justified on grounds of economic efficiency (Art. 5 para. 2 CA), if:
  - they are **necessary** in order to reduce production or distribution costs, improve products or production processes, promote research or dissemination of technical or professional know-how, or exploit resources more rationally; and
  - they will under no circumstances enable the parties involved to eliminate effective competition.

  - «economic efficiency» = the positive effects of the agreement outweigh its negative effects (suitability of the recommendation for efficiency enhancement)

  - Necessity (no less invasive means)
Justification on grounds of economic efficiency

Requirements under the EU Guidelines on horizontal cooperation on standard setting can be used as guidance in the present case:

- The selection process for a standard is transparent and accessible for the public domain.
- All relevant competitors are allowed to participate in the standard setting process.
- The chosen standard is accessible for all current and potential competitors.
- Market participants remain free to choose a standard that is different to the one chosen in the standard setting process.

→ To be on the safe side in the present case: limit the recommendation to the «technically required minimum».
Retail loans / mortgages

→ The secretariat believes that the standardization should not anticipate consumer preferences whether the interest rate is known in advance or at the end of the interest period.

→ In order to be justified on grounds of economic efficiency a recommendation towards a restriction of processing variants for retail loans must
  → include one processing variant from the group „in arrears“
  → include one processing variant from the group „in advance“
  → include at the least three processing alternatives in total
Capital market debt instruments

Syndicated loans

- Tender phase (competition stage) / market consultation phase / processing phase
- Cash flows must be transferred and managed between different financial institutions
- Potentially: multicurrency syndicated loans
  → A recommendation towards a restriction to one or more processing variants can be justified on grounds of economic efficiency

Floating rate notes

→ The Secretariat concludes that the required synchrony with the derivatives market justifies a recommendation towards a restriction to one processing variant on grounds of economic efficiency (liquidity / exchange trading)
Recap: options for using a compounded SARON

0. Plain

1. Payment Delay

2. Lockout period

3. Lookback*

4. Last Reset

5. Last Recent

6. Interest Rollover

* The weighting and the rate are shifted. ISDA uses the term «backward-shift» for this option.
Institutions should individually define their product strategy given the guidance on options using compounded SARON

- Discussions on national and international level on loan options is currently centered around options 0), 3) and 4)
- Preference varies according to client segments and currencies
- For a detailed assessment please also see the NWG Slides from February 2019
Overview: visibility of compounded SARON

<table>
<thead>
<tr>
<th>Compounded SARON*</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formula for compounding</strong></td>
<td>Compounded SARON can individually be calculated (done by e.g. banks)</td>
<td>Available</td>
</tr>
<tr>
<td><strong>SAION</strong></td>
<td>Allows simple and precise calculation</td>
<td>Available</td>
</tr>
<tr>
<td><strong>Matrix</strong></td>
<td>Centralized calculation provided by SIX</td>
<td>Sample data as xls-file</td>
</tr>
<tr>
<td><strong>Calculator</strong></td>
<td>Requires only start- and end-dates, could be used by retail clients for verification</td>
<td>Available as an xls-file</td>
</tr>
<tr>
<td><strong>Compound Indices (1M, 3M, 6M)</strong></td>
<td>Unique fixings per business day for specific tenors, minor differences possible; suitable for media</td>
<td>Sample data available</td>
</tr>
</tbody>
</table>

* For further information see SIX or the appendix.
Requirements for the calculator for compounded SARON

Challenge:
- Compounded SARON depends on specific start- and end-dates
- Calculation and thus verification can be challenging for retail clients and SMEs

Requirements:
- User friendly, i.e. requires only start- and end-dates, which can be entered into a web-based interface
- Free-to-use, i.e. usage of the calculator is free of charge
- Provided by an independent and credible source, e.g. by SIX

Index providers (e.g. SIX) are invited to implement a user friendly and free-to-use calculator for compounded SARON
Update from SIX (administrator of SARON)

EU Benchmark Regulation
- The application for an endorsement of the SIX Indices under the EU BMR was handed in
- SARON, SAION, “SARON 1, 3, 6 months Compound Indices” are part of the application
- SIX is currently in discussion with the regulator to clarify questions. An approval is expected not before Q1 2020
- The EU and ESMA have announced to prolong the transition period for 3rd country indices until end of 2021
- SIX has created a webpage to inform about the regulatory topics affecting its indices

Current work of the Index Commission for Swiss Reference Rates
- The methodology for “SARON 1, 3, 6 months Compound Indices” was discussed in a recent meeting
- The explanatory document for the “SARON 1, 3, 6 months Compound Indices” was shared with the Index Commission
- SIX has collected feedback and is in contact with members of the NWG sub-working groups for the design of the SARON Compound Indices
Index and SARON license models

SIX intends to establish a **pragmatic licensing** model with **limited administrative impact** following existing practices (index industry / ICE LIBOR). The pricing will be competitive compared to industry standards. SIX has reached out to several banks to explain and **verify the current licensing approach** and **clarify the use-cases**. Banks are invited to contact SIX in case they have questions. SIX intends to publish a FAQ with clear and comprehensive explanation for the terms & conditions.

The Swiss Reference Rates including SARON are available under the following license models:

**Index Data License** (data license order form)
- Internal use of SARON data for example for “SARON mortgages” and data access via terminal (license created in 2018 based on the demand from the market)

**Index Product License** (product license order form)
- The use of SARON as underlying for financial products such as derivatives, structured products, insurance policies, FRNs. The Index Product License is already in place with major banks in Switzerland and is applied in connection with other SIX indices - so far applied once for SARON for a bond issuance. SIX will verify this approach in upcoming meetings with customers.

For potential other use-cases of SARON the demand or relevance for the Swiss Market is not yet confirmed
- ICE LIBOR is listing various other use-cases and as of today it is unclear whether these use-cases are relevant for the Swiss Market or if use-cases are missing
- SIX would like to clarify potential further use-cases and update the definitions if necessary

- In case there is a need for a redistribution of Swiss Reference Rates (including SARON, SAION, SARON Compound Indices) to third parties, SIX intends to apply industry standards
- In case there is a need for derived benchmark calculations, SIX intends to apply industry standards
Compounded SARON on Non-Business Days (N-BD)

**Challenge:**
- So far, compounded SARON is only defined for business days
- Mortgages can start/end on Non-Business days, e.g. due to quarter ends

**Modified standard formula for N-BD (see appendix):**
- Standard formula for compounding can also end and/or start on N-BD
  - Pro: Simple and already implemented by some banks and infrastructure providers
  - Contra: SAION on N-BD not unique and hence not possible (see also appendix)

<table>
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<th>TH</th>
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<th>SU</th>
<th>MO</th>
<th>TU</th>
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<td>-0.72</td>
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<td>?</td>
<td>-0.78</td>
<td>-0.74</td>
<td>-0.75</td>
<td>-0.76</td>
<td>-0.71</td>
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<td>3</td>
<td>1</td>
<td>3</td>
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</table>

- **Modified standard formula should be used for N-BD**
- **Calculator for compounded SARON, but not for e.g. SAION or SAR3MC, should incorporate modified standard formula**
Floored compounded SARON

Considerations:
- Compounded SARON is used as the contractually fixed interest rate in lending contracts, not the individual SARON rates
- Hedging (e.g. caps and floors) is more efficient in case compounded SARON is floored
- Flooring the compounded SARON is suitable for products with a constant notional, which is true for most cash products in the CHF market

- Market participants are free to decide whether a floor is applied and at which level this floor is applied
- If a floor is part of the contract and the notional is constant, it should be applied to compounded SARON and not on each individual SARON rate
EU consumer protection: notice of rate changes in the mortgage credit directive (Art. 27 2014/17/EU)

(1) Member States **shall ensure** that the creditor informs the consumer of any change in the borrowing rate… **before** the change takes effect.

(2) However, the **Member States may allow** the parties to agree in the credit agreement that the information referred to in paragraph 1 is to be given to the consumer **periodically** where the change in the borrowing rate is correlated with a change in a **reference rate**

Implementation e.g. in German law:

§492 (7) BGB and Art. 247 §15 (2) BGBEG

- Local law determines whether periodical instead of in-advance notice is possible
- Market participants should assess compliance of an «in arrears» structure with the local law
Recommendations and next steps

Recommendations:

− Institutions should individually define their product strategy given the guidance on options using compounded SARON
− Index providers (e.g. SIX) are invited to implement a user friendly and free-to-use calculator for compounded SARON
− To calculate compounded SARON on non-business days, the modified standard formula should be used. The calculator for compounded SARON (but not e.g. SAION or SAR3MC) should use the modified standard formula
− Market participants are free to decide whether a floor is applied and at which level this floor is applied. If a floor is part of the contract and the notional is constant, it should be applied to compounded SARON and not on each individual SARON rate
− Local law determines whether periodical instead of in-advance notice is possible. Market participants should assess compliance of an «in arrears» structure with the local law
− Market participants should liaise (individually or in user-groups) with their infrastructure providers in order to be ready for SARON-products. Infrastructure providers should further work on the implementation

Next steps

− Monitor and foster national and international developments regarding the implementation and/or usage of compounded term rates in cash products, e.g. by participation in the loan group led by the ARRC
− Continue to consider feasibility of options for using compounded RFR in syndicated lending and discuss contractual robustness
− Liaising with infrastructure providers to foster the implementation of the NWG’s recommendations, e.g. via webinar
3. LIBOR fallback language and legacy book transition
Topics

- Legacy book transition
  - Unwind now
  - Rely on fallbacks
- Fallback language
  - Fallback design and pre-cessation trigger
  - ISDA consultations and approach taken by the Swiss Bankers Association for Swiss Master Agreement
Legacy book transition: Executive Summary

Challenge:
- The discontinuation of CHF LIBOR is very likely
- Uncertainty about when and how it happens. LIBOR might continue for some time beyond 2021
- Moreover, the EU Benchmark Regulation (BMR) allows the regulator to declare a benchmark as “non-representative”, which would prohibit the usage by EU supervised entities for new contracts

Transition strategies:
1. Unwind now  → early transition (before end 2021)
2. Rely on fallbacks  → late transition (on or after end 2021)

- Transition CHF LIBOR exposures prior to end of 2021 wherever possible
- Align fallback language to the chosen transition strategy. In particular, consider the potential usage of a pre-cessation trigger
Decision tree

Legacy book transition

Unwind now

Rely on fallbacks

Without «pre-cessation»

With «pre-cessation»

LIBOR-world

SARON-world
Unwind now (1. transition strategy)

Advantages

- **Legal certainty**: not exposed to potential legal conflicts once LIBOR is discontinued or non-representative
- **Certainty with regard to timing and methodology**: not reliant on FCA, ICE Benchmark Administration (IBA), ISDA or CCPs decision on when and how LIBOR transactions are transitioned
- **Economic certainty**: locking-in the current SARON-LIBOR spread
- **Operational certainty/readiness**: no operational risk of having to book and adjust calculation/valuation margin as well as collateral requirements for a large number of trades on one single day
- **Pricing certainty**: no risk of having illiquid LIBOR positions towards the end of 2021, which might require additional capital charges (FRTB \(\rightarrow\) see slide 48 from the last NWG-meeting)

Drawbacks

- **Opportunity costs**: transition rate might be better at a later point in time
- **Current markets** might not be very liquid or exist yet
Relying on fallbacks (2. transition strategy)

Requires
- Agreement on fallbacks (e.g. on pre-cessation trigger)
- Implementation: legal documents, operations, and IT systems (see appendix)

Advantages
- Handling the legacy book at previously agreed market standards (fallbacks)

Drawbacks
- Fallback clauses not yet finalized
- EU Benchmark regulation could split markets if no “pre-cessation” triggers are implemented across products and currency areas
- Basis risks have to be accepted in case fallbacks are not aligned perfectly between cash and derivatives (trigger and fallback rate)
Fallback design – elements of a fallback

What triggers the fallback?
- Trigger event

Include pre-cessation event as fallback trigger?

What replaces LIBOR?
- Base rate
- Spread adjustment

+
Distinction between LIBOR fallbacks for loans and derivatives

<table>
<thead>
<tr>
<th>Products</th>
<th>Characteristics</th>
<th>Fallback</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Derivatives</strong></td>
<td>Standardized contracts, often UK Law</td>
<td>Amendment of Master Agreement</td>
</tr>
<tr>
<td>• Swaps</td>
<td>Often sophisticated counterparties</td>
<td>• ISDA protocol</td>
</tr>
<tr>
<td>• CCBS</td>
<td>Often maturity &gt;2021</td>
<td>• SBA – master agreement ✔</td>
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<tr>
<td>• ...</td>
<td></td>
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</tr>
<tr>
<td><strong>Loans</strong></td>
<td>Heterogeneous contracts</td>
<td>Fallback template for new loans</td>
</tr>
<tr>
<td>• Mortgages</td>
<td>Also less sophisticated counterparties</td>
<td>• FRN discussion paper ✔</td>
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<td>• Syndicated Loans</td>
<td>Often shorter maturities</td>
<td>• Bilateral under Swiss law ✔</td>
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<td>• LMA protocol</td>
</tr>
<tr>
<td></td>
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<td>• ARRC recommendation on fallback</td>
</tr>
</tbody>
</table>
Scenarios how fallbacks could be triggered

**Scenario A**

- **(1) Discontinuation of LIBOR**
  - All contracts have to switch
  - Contracts without fallback problematic $\rightarrow$ high risk scenario

**Scenario B**

- **(1) Loss of representativeness of LIBOR**
  - No new LIBOR contracts under BMR $\rightarrow$ high risk to split the market
  - Existing contracts could continue to use LIBOR

- **(2) Discontinuation**
  - All contracts have to switch
Pre-cessation trigger for cash and derivative products

Challenge:
- Non-compliant benchmarks cannot be used in the EU for new contracts (EU Benchmark Regulation, BMR)
- FCA or IBA have to assess LIBOR’s BMR compliance (representativeness) each time a panel bank intends to leave
- Without a «pre-cessation» trigger, legacy contracts would continue (for a transitional period) to use LIBOR

Consequences without a pre-cessation trigger
- **Split of the market**
  - Across jurisdictions: New LIBOR-contracts still possible outside the EU
  - Across cash and derivative products: Heterogeneous triggers generate basis risks. If, e.g., cash products switch but derivatives do not, existing hedges increase basis risks
  - Across centrally cleared and non-centrally cleared transactions (CCPs likely include a pre-cessation trigger)
- **Legacy contracts difficult to unwind or hedge;** no new offsetting-trades for EU supervised entities (lock-in effect)
- **Usage of a «non-representative LIBOR»** (perhaps more volatility and different level due to fewer panel banks)
Current views on a pre-cessation trigger

**Favoring pre-cessation triggers**

NWG: Published SARON FRN [paper](#) including a pre-cessation trigger (June 2019). Discussed a fallback language for new [retail loans](#), which continue to use CHF LIBOR (October 2018). The discussed fallback also includes a trigger in case the benchmark is “no longer recognized as reference rate” (i.e. representative).

ARRC: Issued recommendations for cash-products to include a pre-cessation trigger (for [FRN](#) and [syndicated loans](#) in April 2019; [bilateral business loans and securitizations](#) in May, 2019; Consultation for [adjustable rate mortgages](#) in July 2019)

LMA: Revised replacement of screen rate [clause](#) also for pre-cessation (August 2019)

FCA: [Speech](#) by Edwin Schooling Latter promoting pre-cessation triggers (January 2019)

OSSG: Public [letter](#) to ISDA promoting pre-cessation triggers (March 2019)

CCP: LCH and CME can decide unilaterally what can be cleared and how to apply fallbacks, i.e. they will likely [use pre-cessation triggers](#) even if this is not included in the 2006 ISDA Definitions

**Favoring but unclear how to implement**

ISDA: Results of the [Consultation](#) indicate that market participants would generally not want to continue using (L)IBOR following a statement from a regulator that it is no longer representative. However, the consultation did not reveal a consensus on how to implement the pre-cessation trigger. Clarity from regulators regarding specific circumstances and timing could help (October 2019).
ISDA IBOR Fallback Update

November 2019
ISDA IBOR Fallbacks: Implementation in ISDA Documentation

- Amendments to relevant Floating Rate Options in Section 7.1 of the **2006 ISDA Definitions**
  - Amended and restated Floating Rate Options will generally include:
    - The existing price source information;
    - A statement identifying the objective triggers for a ‘permanent cessation’ that would activate the selected fallbacks; and
    - A description of the fallback that would apply upon the occurrence of that trigger, which will be the adjusted RFR plus the spread adjustment

- Floating Rate Options in the 2006 ISDA Definitions are generally incorporated by reference into confirmations for uncleared interest rate derivatives and the rulebooks of CCPs that clear interest rate derivatives

- Amendments will be implemented via a ‘Supplement’ to the 2006 ISDA Definitions (currently almost 60 supplements)

- Upon publication of the Supplement amending the relevant Floating Rate Option, all *new* derivative transactions that incorporate the 2006 ISDA Definitions will include the fallbacks (counterparties will *not* have to take any additional steps)
ISDA IBOR Fallbacks: Implementation in ISDA Documentation

• ISDA will also publish a Protocol to facilitate inclusion of the amended definitions (i.e. the definitions with fallbacks) into existing derivative transactions that were entered into prior to publication of the relevant Supplement
  • Will apply to existing derivatives transactions that incorporate either the 2006 ISDA Definitions or the 2000 ISDA Definitions
• Adherents to the Protocol will agree that derivatives transactions that they have entered into with other adherents prior to publication of the relevant Supplement will be based on the relevant amended Floating Rate Options in the 2006 ISDA Definitions, notwithstanding of the dates of the transactions
• Existing derivatives transactions entered into prior to the date of the relevant Supplement amending the 2006 ISDA Definitions between counterparties that do not both adhere to the Protocol, or otherwise (e.g. bilaterally) agree to include the amended definitions in their transactions, will not include the fallbacks
ISDA May 2019 Fallback Consultations Results – Supplemental Consultation

2019 Supplemental Consultations on spread and term adjustments for fallbacks in derivatives referencing USD LIBOR, CDOR, and HIBOR (and certain aspects of fallbacks for SOR):

- Consultation ran May 16-July 12, 2019
- This supplemental consultation built on the 2018 consultation regarding spread and term adjustments for fallbacks in derivatives referencing GBP LIBOR, CHF LIBOR, JPY LIBOR, TIBOR, Euroyen TIBOR, and BBSW.
- ISDA received feedback from 85 entities in a variety of jurisdictions, including banks, asset managers, pension funds, insurance companies, central counterparties (CCPs) and government entities. Consistent with the 2018 Consultation, the overwhelming majority of respondents preferred the “compounded setting in arrears rate” for the adjusted risk-free rate (RFR) and the “historical mean/median approach” for the spread adjustment.
- Respondents cited both support for the substance of these approaches and a strong desire to use the same adjusted RFR and spread adjustment across all benchmarks covered by the supplemental consultation and last year’s consultation (as well as potentially other benchmarks such as EUR LIBOR and EURIBOR, for which ISDA expects to launch a supplemental consultation at EoY 2019 or Q1 2020).
- Based on the foregoing and subject to the ongoing work and ultimate decision of the ISDA Board Benchmark Committee, ISDA expects to proceed with developing fallbacks for inclusion in its standard definitions based on the compounded setting in arrears rate and the historical mean/median approach to the spread adjustment for USD LIBOR, CDOR and HIBOR.
Term and Spread Adjustments

• The **Compounded Setting in Arrears Rate** is the relevant RFR observed over the relevant IBOR tenor and compounded daily during that period
  - Need to calculate and publish for each relevant IBOR tenor
  - Need to analyze and address technical adjustments necessary to fallback from a forward-looking term rate that is available at the beginning of the period to a compounded rate that is not available until the end of the period (including, e.g., adjustments to payment dates, lock-out periods)

• The **Historical Mean/Median Approach** to the spread adjustment is based on the mean or median spot spread between the IBOR and the adjusted RFR calculated over a significant, static lookback period prior to the relevant announcement or publication triggering the fallback provisions
  - Need to calculate and publish for each relevant IBOR tenor based on historical differences between the IBOR for that tenor and the relevant RFR compounded over the relevant tenor (so, the spread will differ across different tenors for the same IBOR)
  - Need to determine final parameters, including whether to use the mean or the median, the length of the relevant lookback period, whether to use a transitional period (as described in the recent consultation) and whether to apply any other variations (some of which are described in the summary of consultation results)
ISDA September 2019 Consultation on Final Parameters

- Seeks input on the final parameters related for the (1) compounded setting in arrears rate and (2) historical mean/median approach to the spread adjustment

  - **Compounded setting in arrears rate**
    - Is it necessary to apply a backward-shift, lockout or similar adjustment to avoid making payments on the same date as the date on which the fallback rate is known?
    - If so, what adjustment should apply?
    - Related technical questions

  - **Historical mean/median approach to the spread adjustment**
    - Two primary options based on responses to 2018 consultation and 2019 supplemental consultation:
      - Median with five-year lookback period from announcement regarding cessation
      - Trimmed with ten-year lookback period from announcement regarding cessation
    - Related technical questions

- Closed October 23, 2019 – Responses under review
ISDA May 2019 Fallback Consultations Results – Pre-Cessation Issues

2019 Pre-cessation Consultation for LIBOR and Certain Other Interbank Offered Rates:

- Consultation ran May 16-July 12, 2019
- ISDA received responses from 89 entities in a variety of jurisdictions, including a variety of market participants including banks and broker-dealers, insurance companies, asset managers, government/federal entities and CCPs.
- Respondents expressed a wide variety of views regarding whether and how to implement a pre-cessation trigger related to “non-representativeness” for derivatives.
- In general, the respondents fell into three categories, without a clear majority in any one category:
  - Those who supported adding a pre-cessation trigger to the permanent cessation triggers in the “hard wired” amendment to the 2006 ISDA Definitions and related protocol.
  - Those who supported use of the pre-cessation trigger provided that it was implemented with optionality and flexibility (or indicated that their support for the trigger depended on a number of factors).
  - Those who opposed the pre-cessation trigger.
- Respondents also expressed a number of issues for consideration related to the potential pre-cessation trigger itself and how to implement such a trigger.
**IBOR Fallbacks: DRAFT Updated Timeline**

- Supplemental consultation on the term and spread adjustments for USD LIBOR, CDOR and HIBOR – *Completed July 2019 and final results published September 2019*

- Consultation seeking further input on the preferred approach for addressing pre-cessation issues in derivatives that reference LIBOR and potentially other IBORs, including in the context of a regulator’s statement that the relevant IBOR is no longer representative – *Completed July 2019 and preliminary results published August 2019*

- Selection of vendor to publish term and spread adjustments – *Completed July 2019 (Bloomberg was selected in a competitive RFP)*

- Publication of anonymized summary of responses to consultation on pre-cessation issues – *published October 21, 2019*

- Consultation on open issues associated with the final parameters for the term and spread adjustments. This consultation covers all previous consulted IBORs – *deadline for responses was October 23, 2019; results to be published in November or December 2019*

- Finalize amended definitions and protocol for all covered IBORs (including EUR LIBOR and EURIBOR, but with the drafting for these IBORs contingent upon and subject to the results of the supplemental consultation) – *December 2019*

- Supplemental consultation on the term and spread adjustments for EUR LIBOR and EURIBOR (including final parameters) – *November or December 2019 (when publish results of consultation on final parameters for other IBORs); comments due 6-8 weeks later (January 2020) and results published 2-4 weeks after comment deadline (February 2020)*

- Publication of amended definitions and protocol for all covered IBORs (including EUR LIBOR and EURIBOR if results of supplemental consultation are consistent with results of consultations for other IBORs) – *February 2020 (with effective date approximately 3 months later)*
Update on Swiss Bankers Association’s approach for the Swiss Master Agreement (SMA)

The AG OTC is a working group consisting of legal counsels from 10 banks, hosted by the Swiss Bankers Association (SBA).

With regard to the cessation of LIBOR, the AG OTC has agreed to follow the international approach of ISDA and therefore to draft an IBOR Annex:

1. with the same triggers as ISDA for replacement of IBORs
2. with the same RFRs as ISDA as Primary Fallback Rates, and
3. to apply the same methodologies as ISDA for Term Adjustments and Spread Adjustments.

Timeline: The AG OTC expects ISDA to finalise its IBOR documentation in Q1 2020, following such publication the IBOR Annex ought to be drafted and finalised in Q1/Q2 2020 after being discussed in the AG OTC. Such IBOR Annex shall reproduce the ISDA documentation.
4. SARON-based derivatives
New template for caps (floors) confirmation and adjustment to SARON swap confirmation

- NWG created a **new** template for a caps (floors) confirmation

- NWG released a draft template for a SARON swap confirmation in January 2017 and updated it at the NWG meeting in June 2019

- New minor adjustments to the existing template have to be implemented
SARON-based caps (floors)

- The new caps (floors) template references the CHF-SARON-OIS-COMPOUND for the relevant interest rate period(s) instead of directly referencing each SARON fixing (i.e. only the compounded in-arrears rate for each period is compared to the strike and not to each fixing).

- SARON-based caps (floors) follow the SARON OIS market template:
  - Floating Rate Option: CHF-SARON-OIS-COMPOUND as defined in Supplement 51 to the 2006 ISDA Definitions (published April 3, 2017)
  - Floating Rate Day Count Fraction: Actual / 360
  - Delayed Payment: 2 Business Days

- Caps (floors) confirmation follows the standard interest rate period for the SARON OIS market (“annually”). Different periods (“semi-annually” and “quarterly”) are possible

Publish the caps (floors) confirmation and the amended SARON swap confirmation
CCBS based on RFRs

- The NWG participated in the international working group led by the ARRC (“Market Structure Working Group of the ARRC”), striving to align market conventions in the interdealer cross currency market.
- To limit credit risk it was deemed prudent to align payment dates of principal between currency pairs.
- It is not always possible to align principal payments, interest payments and interest observation period between currency pairs.
- The following conventions were also discussed:
  - Frequency of interest payments
  - Exchange and reset of notional
  - Discounting and PAI
- A summary paper is expected to be published in due course.
USD/CHF CCBS based on RFRs: “Payment Delay”

Challenge:
- There is a trade-off between alignment of payment and interest observation period
- Other structures are possible, they have been assessed and can be found in the appendix

Pros: aligned with OIS market
- Interest period matches observation period
- In line with both OIS legs
- Perfect hedge on OIS and economics (on new RFR) for at least one currency

Cons: split of payments
- Misalignment between interest and notional payments
- Twice as many cash flows at the end of the contract

Consider «Payment Delay» for USD/CHF CCBS for the interdealer market
FX Swaps are key instruments in hedging FX risk

**Trade confirmation**
- Transaction date: xxx
- Value Date near: xxx
- Value Date forward: xxx
- We buy USD xxx

**FX spot:** CHF/USD xxx
**FX fwd:** CHF/USD xxx

**Theory FX-IR parity**
- FX spot
- CHF IR reference curve
- USD IR reference curve
- FX forward

**Reality FX-IR parity**
- FX spot
- CHF IR reference curve
- USD IR reference curve + spread
- FX forward

- Internal interest rate reference curves are not part of trade confirmation
- Spread in reality driven by absolute funding costs, not by reference rate
- We have no indication that the transition to RFR has an impact on FX swaps
5. Effects on financial reporting and regulation
Standard setter update*: IASB and FASB

- IASB published Amendment “Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7)” on 26 September 2019:
  - Analysis of pre-replacement issues (focus on ‘the highly probable requirement’; ‘prospective assessments’; and ‘separately identifiable risk components’)
  - Effective date 1 Jan 2020
  - Analysis of potential replacement issues (so called phase 2) is expected in due course
- FASB published a proposal of Accounting Standards Update, Reference Rate Reform (Topic 848): “Facilitation of the Effects of Reference Rate Reform on Financial Reporting” on 5 September 2019

Key point under both accounting regimes:
- Entities can assume that the hedged cash flows, hedged items, hedged risks, and corresponding hedging instruments are not altered as a result of the reform although the critical terms of these hedging relationships have changed (i.e., the interest rate)
  → no de-designation of hedge accounting, and thus no related P/L volatility

*See also: slides in the appendix, paper «IBOR to RFR transition: effects on financial reporting” (July 2019) and the last NWG slides (43-46)
Impact of IBOR transition on insurance solvency

Summary
- Discontinuation of IBORs in its current form at the end of 2021 should trigger a review of the applicable interest rate curves. If the regulators make no adjustments, solvency ratios of insurers are expected to be impacted.
- More clarity is required on:
  - Definition of new reference rates on which solvency model risk-free term structures are based on
  - Potential adjustments to the risk free interest rate term structures (e.g. credit risk adjustment)
  - Timeline of transition
- Other potentially impacted topics in the area of actuarial valuation include: pricing, model calibration, CHF LIBOR based valuation in SST (e.g. variable annuity business), Value of New Business (VNB), Interest Rate Margin, Zinszusatzreserve (ZZR), Minimalanforderungen für Rückstellungen, etc.
Impact of IBOR transition on insurance solvency

Steps taken so far

- The working group on Sterling Risk-Free Reference Rates sent an open letter to EIOPA encouraging them to actively remove the recognized Solvency II barriers to transition.
- Summary of open issues was sent to FSB OSSG Subgroup and FINMA
- Topic of IBOR-transition and its impact on insurance solvency is now on the agenda for the meeting of the technical commission of the SVV (Schweizerischer Versicherungsverband) – first meeting happened on 5th of September

Insurance companies and regulators should identify the impacted areas in solvency and actuarial models affected by the IBOR transition and prepare accordingly
6. Recommendations
Recommendations I

- Institutions should individually define their product strategy given the guidance on options using compounded SARON.
- Index providers (e.g. SIX) are invited to implement a user friendly and free-to-use calculator for compounded SARON.
- To calculate compounded SARON on non-business days, the modified standard formula should be used. The calculator for compounded SARON (but not e.g. SAION or SAR3MC) should use the modified standard formula.
- Market participants are free to decide whether a floor is applied and at which level this floor is applied. If a floor is part of the contract and the notional is constant, it should be applied to compounded SARON and not on each individual SARON rate.
- Market participants should liaise (individually or in user-groups) with their infrastructure providers in order to be ready for SARON-products. Infrastructure providers should further work on the implementation.
- Local law determines whether periodical instead of in-advance notice is possible. Market participants should assess compliance of an «in arrears» structure with the local law.
Recommendations II

- Transition CHF LIBOR exposures prior to end of 2021 wherever possible
- Align fallback language to the chosen transition strategy. In particular, consider the potential usage of a pre-cessation trigger
- Publish the caps (floors) confirmation and the amended SARON swap confirmation
- Consider «Payment Delay» for USD/CHF CCBS for the interdealer market
- Insurance companies and regulators should identify the impacted areas in solvency and actuarial models affected by the IBOR transition and prepare accordingly
7. Next steps
Next steps

− Monitor and foster national and international developments regarding implementation and/or usage of compounded term rates in cash products and the adoption of SARON in derivatives markets (all)

− Continue to consider feasibility of options for using compounded RFR in syndicated lending and discuss contractual robustness (L&D sub-working group)

− Liaise with infrastructure providers to foster the implementation of the NWG’s recommendations (all)

− NWG sub-working groups continue to liaise with other international working groups to align and coordinate efforts, in particular in areas where alignment is beneficial (all)
Next NWG meeting and publication of results

- Next NWG meeting is scheduled for 8 April 2020, 15:00 - 17:00 (CET)
- Publication of NWG’s recommendations
  - Short summary of the meeting by 13 November 2019
  - Meeting minutes will be published on NWG website
Appendix
Standard formula for compounded SARON

\[
SARON \text{ Compound} = \left[ \prod_{i=1}^{bd} \left( 1 + \frac{r_i a_i}{dcc} \right) - 1 \right] \frac{dcc}{n}
\]

- **n** number of calendar days in the observation period from (and including) the start date to (but excluding) the end date. E.g. n equals one for an observation period from Monday to Tuesday.
- **bd** number of business days in the observation period from (and including) the start date to (but excluding) the end date. E.g. bd equals one for an observation period from Monday to Tuesday.
- **i** index that goes from one to bd
- **dcc** applicable day count convention (360 for the Swiss Franc)
- **r_i** SARON for business day i
- **a_i** number of calendar days for which SARON \( r_i \) applies
Modified standard formula for N-BD

Note: Modifications are marked in red.

\[
SARON \ Compound = \left[ \prod_{i=1}^{bd} \left( 1 + \frac{r_i a_i}{dcc} \right) - 1 \right] \frac{dcc}{n}
\]

\(n\) number of calendar days in the observation period from (and including) the start date to (but excluding) the end date. E.g. \(n\) equals one for an observation period from Monday to Tuesday.

\(bd\) number of “modified” business days in the observation period from (and including) the start date to (but excluding) the end date. E.g. \(bd\) equals one for an observation period from Monday to Tuesday. It is “modified”, as \(bd\) increases by one, in case the start or end date is a non-business day. In case the start and end date are non-business days, \(bd\) increases by two.

\(i\) index that goes from one to \(bd\)

\(dcc\) applicable day count convention (360 for the Swiss Franc)

\(r_i\) SARON for business day \(i\)

\(a_i\) number of calendar days for which SARON \(r_i\) applies (e.g. if the observation period ends on a Sunday, \(a_{bd}\) equals two)
Modified standard formula: Inconsistency

Note that the Modified Standard Formula is in that sense not 100% consistent with the Standard Formula, as adding a “stopover” at a N-BD slightly changes the compounded interest:

In the Standard case, the weekend (Friday to Monday) obtains a factor \( 1 + \frac{3 \times \text{SARON}(\text{Fri})}{360} \) in the result, whereas with a stopover at Sunday, the weekend obtains a factor \( \left( 1 + \frac{2 \times \text{SARON}(\text{Fri})}{360} \right) \left( 1 + \frac{1 \times \text{SARON}(\text{Fri})}{360} \right) \). However, with a notional of CHF 1 Mio. and a SARON of 1%, the difference in interest will be less than CHF 0.002, whereas with SARON of 10%, it would be less than CHF 0.20.

Note also, that this inconsistency is the reason, why the Modified Standard Formula does not allow to calculate a SAION for N-BD.
### SAION: Usage of the Indexed SARON

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SAION can be used to easily calculate all compounded SARON

\[
\text{compounded SARON} = \frac{360}{\text{Number calendar days}} \cdot \left( \frac{\text{SAION}_{\text{end date}}}{\text{SAION}_{\text{start date}}} - 1 \right)
\]
1M, 3M and 6M compounded SARON Indices – new methodology

Challenge:
1. Current methodology for indices is not efficient especially for EoM (1M)
2. Current methodology shortens the observation period systematically

New methodology:
1. In case end date is a EoM, always use for start date the respective preceding EoM.
2. In case there are several start dates, use the middle start date for uneven number of start dates and for an even number of start dates use the earlier/previous but closest to the middle date.
USD/CHF CCBS based on RFRs
2-day lookback

Pros
• Cash flow alignment
• Easier to apply to legacy books
• Interest payment notification happens 1-day before notional repayment or notional resets
• Better alignment with the FRN market that widely uses lookback

Cons
• Interest and observation period don’t match
• Economic mismatch on 2 days

- Initial notional exchange: t+2
- Observation period: t to t+3m
- Interest period: t+2 to t+2+3m
- Final notional exchange: t+2+3m
- Interest payment: t+2+3m
USD/CHF CCBS based on RFRs

2-day lockout

**Pros**
- Cash flow alignment
- Economics aligned at the beginning
- Interest payment notification happens 1-day before notional repayment or notional resets

**Cons**
- Economics misaligned at every period
- Potential 6-day lockout for holidays or long week-end

- Initial notional exchange: t+2
- Observation period: t to t+3m
- Interest period: t+2 to t+2+3m
- Final notional exchange: t+2+3m
- Interest payment: t+2+3m
Transitioning the legacy book
How a transitioned LIBOR swap would look like (from ISDA last consultation)

Scenario 1:
CHF LIBOR

Scenario 2:
Backward shift / lookback

Scenario 3:
Lockout

20 September 2019 is the period end date and the reset date

Calculation Period (last day in the Calculation Period is 19 December 2019 as Calculation Periods excludes the next Period End Date)

20 December 2019 is the next Period End Date and also the Payment Date for Calculation Period

20 September 2019 is the period end date and the reset date

RFR observation period (i.e. from and including the day 2 Zurich Banking Days preceding the first date in the Calculation Period to, and excluding, the date 2 Zurich London Banking days preceding the last days in the Calculation Period)

17 December is the end of the observation period

20 December 2019 is the next Period End Date and also the Payment Date for Calculation Period

18 September 2019 is the start of the observation period

Calculation Agent notifies parties of payment no later than close of business on 19 December

20 September 2019 is the period end date and the reset date

RFR observed for each day in this period

RFR for Day N is deemed to be the rate for Day N, N+1, N+2. Calculation Agent notifies parties of payment no later than the COB 19 December 2019

17 December 2019 is day N (i.e. Zurich Banking Days before the last Calculation Period)

20 December 2019 is the next Period End Date and also the Payment Date for Calculation Period

17 December 2019 is day N (i.e. Zurich Banking Days before the last Calculation Period)

Source: ISDA p.14
Standard Setter Update: IASB

IBOR Reform and its Effects on Financial Reporting—Phase 1

- **What?** Analysis of pre-replacement issues (focus on ‘the highly probable requirement’; ‘prospective assessments’; and ‘separately identifiable risk components’)
- **26 Sep 2019:** [Amendment](#) “Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7)” published
  - **Effective date 1 Jan 2020**
  - **Key points are noted in the official project summary**
    - Highly probable requirement: When determining whether a forecast transaction is highly probable, a company shall assume that the interest rate benchmark on which the hedged cash flows are based is not altered as a result of the reform.
    - Prospective assessment: When performing prospective assessments, a company shall assume that the interest rate benchmark on which the hedged item, hedged risk and/or hedging instrument are based is not altered as a result of the interest rate benchmark reform.
    - IAS 39 retrospective assessment: In response to feedback on the Exposure Draft Interest Rate Benchmark Reform (Exposure Draft), the Board decided to amend IAS 39 so that a company is not required to undertake the IAS 39 retrospective assessment for hedging relationships directly affected by the reform. However, the company must comply with all other IAS 39 hedge accounting requirements, including the prospective assessment.
    - Separately identifiable risk components: For hedges of a non-contractually specified benchmark component of interest rate risk, a company shall apply the separately identifiable requirement only at the inception of such hedging relationships.
    - End of application: A company shall cease applying the exceptions when: (a) the uncertainty arising from interest rate benchmark reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows; or (b) the hedging relationship is discontinued. End of application does not apply to the test for separately identifiable risk components.

IBOR Reform and its Effects on Financial Reporting—Phase 2

- **What?** Analysis of potential replacement issues
- **No documents published yet**, but expected in due course
Standard Setter Update: FASB

Reference Rate Reform: Facilitation of the Effects of the Interbank Offered Rate Transition on Financial Reporting

5 Sep 2019: Proposal of Accounting Standards Update, Reference Rate Reform (Topic 848): “Facilitation of the Effects of Reference Rate Reform on Financial Reporting” issued

- Comment letter due date was 7 Oct: The board is currently considering the comment letters for updating the proposal
- Key points are noted in the official ‘FASB in focus’
  - Simplify accounting analyses under current GAAP for contract modifications if qualifying criteria are met
  - Allow hedging relationships to continue without designdation upon the following changes in the critical terms of an existing hedging relationship due to reference rate reform
  - Provide optional expedients for existing fair value hedging relationships for which the derivative designated as the hedging instrument is affected by reference rate reform
  - Provide temporary optional expedients for cash flow hedging relationships affected by reference rate reform
- An entity can elect to apply the proposed amendments as follows:
  - The optional expedients for contract modifications would be applied consistently for all contracts or transactions within the relevant Topic, Subtopic, or Industry Subtopic within the Codification that contains the guidance that otherwise would be required to be applied.
  - The optional expedients for hedging relationships would be elected on an individual hedging relationship basis.