European Association of CCP Clearing Houses

July 2022

EACH Note – Timelines for the transition to risk-free rates

1. Introduction

The European Association of CCP Clearing Houses (EACH) represents the interests of Central Counterparties (CCPs) in Europe since 1992. CCPs are financial market infrastructures that significantly contribute to safer, more efficient and transparent global financial markets. EACH currently has 18 members from 14 different European countries. EACH is registered in the European Union Transparency Register with number 36897011311-96

In line with their function as independent risk managers, CCPs manage the risk of a variety of financial instruments and guarantee the performance of transactions in regulated financial markets and some OTC financial markets. Many of these transactions are referenced to benchmarks, which have been subject to increased scrutiny in recent years. EACH Members have accordingly been involved in the transition away from so-called "*IBORs" and towards more robust risk-free rates ("RFRs") in a number of currency areas, such as Euro, Pound Sterling and Swiss Franc (See Table 1 below). We welcome these transitions and want to ensure they are a success for all stakeholders.

This paper aims to consider the different stages involved in an orderly transition from *IBORs towards risk-free rates given the experience accumulated in previous transitions. This should hopefully contribute to ensuring realistic timelines in future transitions towards risk-free rates.

2. Stages towards an orderly transition

Due to the vast number of financial products typically referenced to the *IBOR in a given currency, the number of actors involved in the transition from the *IBOR and the different stages to be met, a transition towards risk-free rates needs thorough consideration and careful planning.

Not all transitions take the same amount of time as they depend on a number of differing factors. Table 1 below shows the approximate time taken towards the transition to risk-free rates in different currency areas in realised transitions and those already in progress with announced cessation dates.

Table 1: Approximate time taken towards the transition to risk-free rates in different currency areas

Currency	Vulnerable Benchmark	Transition WG name / date established	Recommended Alternative Rate (RAR)	Date RAR identified	Newly minted RAR? If so, when first published?	Clearing Eligibility Date for RAR OIS	RAR added as contractual fallback to IBOR?	Cleared swap transition	Index Cessation	Total Transition Timeline †
GBP	LIBOR	£ RFR WG / 2015	SONIA	Apr-17	No	Already eligible	Yes / Oct-20	Dec-21	31-Dec-21	**4yrs 8 months**
USD	LIBOR	ARRC / 2014	SOFR	Jul-17	Yes / Apr-18	Jul-18	Yes / Oct-20	Apr / May 2023	30-Jun-23	**6yrs**
CHF	TOIS*	Swiss National WG / Jun-13	SARON	Nov-16	No	Oct-17	No	No transition	31-Dec-17	**1yr 2months**
CHF	LIBOR	Swiss National WG / Jun-13	SARON	Oct-17	No	Oct-17	Yes / Oct-20	4-Dec-2021	31-Dec-21	**4yrs 3 months**
EUR	LIBOR	Euro RFR WG / Feb-17	€STR	Sep-18	Yes / Oct-19	21-Oct-19	Yes / Oct-20	4-Dec-2021	31-Dec-21	**3yrs 3 months**
JPY	LIBOR	C-IC on JPY IR Benchmarks / Aug-18	TONA	Nov-19	No	Already eligible	Yes / Oct-20	4-Dec-2021	31-Dec-21	**2yrs 2 months**
CAD	CDOR	CARR / 2018	CORRA	Jun-18	No	Already eligible	Yes / Oct-20	H1 2024	30-Jun-24	**6yrs**

EUR	EONIA*	Euro RFR WG / Feb-17	€STR	Sep-18	Yes / Oct-19	21-Oct-19	Yes / Oct-19	16-Oct-2021	31-Dec-21	**3yrs 3months**
SGD	SOR	SC-STS / Aug-19	SORA	Aug-19	No	May-20	No	Q2 2023	30-Jun-23	**3yrs 10months**
THB	THBFIX	Steering Committee on LIBOR discontinuation / Apr-20	THOR	May-21	Yes / Apr-20	Apr-22	No	Q2 2023	30-Jun-23	**2yrs 2months**

† From date RAR identified to date of Index Cessation

* Neither TOIS nor EONIA were the main market benchmarks in CHF & EUR, being CHF LIBOR & EURIBOR respectively.

Table 2 below details the different stages to be considered in the transition.

Table 2 - Stages to be considered in the transition

Phase	Stage	Description
Preparation phase	**1. Identification of Recommended Alternative Rate (RAR)**	The identification of the Recommended Alternative Rate (RAR) involves the choice and recommendation of a rate to be used after the one to be ceased. • **If RAR is already produced** → Compliance with relevant benchmark regulation assessed and remedial action planned & taken. • **If RAR is not already produced** → The rate has to be agreed. The numerous steps towards the production include: (i) generation of sufficiently detailed benchmark specification; (ii) communication to & selection from potential benchmark administrators, including access to input data & commercial licensing proposition; and (iii) path to production & adoption, including *beta* phase.
	2. Development of Term versions of the RAR	If the selected RAR is an overnight rate, an analysis required as to whether Term versions of it are necessary to support continued market function.
	3. (First) Publication of RAR	According to the selection of the RAR, this step may or may not be required
	4. Existence of fall-back arrangements	In case a rate ceases to exist, market participants need to have a fallback rate in case they continue to have exposure to that rate after its cessation. ISDA has generally provided fallback rates guidance to market participants, and the explicit linkage to the RAR, and the nature of this linkage, can avoid delays and complications at this stage.
	5. Development of new OIS instruments	There are various steps towards developing new OIS instruments linked to the RAR: • Establishment of market conventions, accounting for new legal, risk, technological & operational factors; • Loading of instrument templates into systems/platforms for pre-trade, execution, trade capture, trade management / maintenance / fulfilment;

		• Promotion & adoption of this capability to support markets in the new instruments
	6. Creating the capability to clear the new instruments	This step consists of: • Gaining internal approval, using the necessary governance processes. This typically requires access to historical data on the benchmark & contract price series over a 10yr horizon, with complications where these do not exist. • Creating and/or fostering an OIS and Plain vanilla swap market. • Closing relationship between CCPs and clearing community (clearing and not clearing members) so all participants are aligned in timelines and aware of the importance of the changes. • As there is not a track record for the new RFR, establishing proxies to create rate curves, e.g. for the EUR an irrevocable relationship between €STR and EONIA was established (the 8.5 bps spread) making a smooth transition.
	7. Regulatory approval of new instruments	The new referenced products need to go through different regulatory approvals in line with existing legislation. Some of these approvals, while fast-tracked could take several months.
Market adoption & adaptation	**8. Other Use of RAR for valuation**	Requirement to adopt the RAR for discounting / valuation (potentially coincident with Contractual conversion).
	9. Contractual conversion process	Conversion of outstanding *IBOR contract population to contracts linked to the Successor rate. In markets where multiple CCPs are relevant to market participants and other stakeholders, sufficient time is required to enable them to shape the central common features of the approach to be followed and the timeframe necessary. Planning will need to take into account legal, risk management, technological & operational impact assessments across the various layers of market infrastructure
	10. Communication Plan	Communication and marketing actions with market participants and relevant stakeholders.

CCP Readiness Timeline	**11. Specific needs of a CCP and its Members:**	Specific steps to be undertaken by the CCP and its Members: - Consultation - Specification - Roll-Out - Market Dry Runs - Fine-Tuning - Go-Live

In addition, we would like to draw your attention to the following material published, for instance, by the Working Group on euro risk-free rates[1] set up by the European Central Bank and other Authorities to identify and recommend risk-free rates that could serve as an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area, such as the euro overnight index average (EONIA) and the euro interbank offered rate (EURIBOR). The material describes the timelines for the currency in various jurisdictions:

- Practical Implementation Checklist for SOFR Adoption (ARRC)
- Transition from EONIA to €STR w/ timeline (EUR RFR WG)
- Timelines to Cease Issuance of SOR and SIBOR-Linked Financial Products w/timeline (SC-STS – Steering Committee for SOR & SIBOR Transition to SORA)

3. Observations from Transition Experience

In the previous section on "Stages towards an Orderly Transition", we have enumerated the potential as well as the likely important steps required to support a successful transition, and have tabulated the timetables applicable for the completion of these steps. However, we have not discussed the more qualitative aspects of this experience, which is valuable in a couple of specific cases.

The transition in the Swiss market from TOIS to SARON is by a significant margin the shortest of the examples provided. It is therefore worth examining this experience in more detail. Several features distinguish it from typical transitions. Most importantly, TOIS was very much a secondary benchmark in a market dominated by CHF LIBOR. This drastically reduced the scale and complexity of the transition. Also critical, TOIS was used very little in retail products. TOIS cessation was therefore a non-event in many communities. On a more technical note, the major role of TOIS rates in the swap markets was in the valuation of CHF LIBOR swap trades: the loss of their availability in the absence of an agreed alternative lead to widespread disputes, which disrupted market function for some time. We elaborate on these and other points in the Appendix.

[1] https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/html/index.en.html

By contrast, the experience of the transition in JPY markets is widely regarded as a success. This is the shortest transition for what we might describe as a critical, dominant benchmark. Undoubtedly, it was very positive to the transition timetable that the JPY market selected TONA as their RAR, since there was already an active swap market in TONA OIS. This meant that a number of the steps that would have otherwise been relevant and are listed in section 2 Table 2 were already dealt with. The remaining steps were to create the strong linkage between JPY LIBOR and TONA via the fallbacks, which came a year after RAR selection, and then to plan and execute contractual conversion a further year later.

4. Conclusion

The already realised transitions towards risk-free rates have been challenging but successful as a result of an adequate and realistic timeline in implementing them. From the choice of an alternative risk-free rate to the necessary regulatory approvals, several stages are involved in the transition. The complementary and supportive role played by Official Sector messaging should also not be under-estimated.

While it is impossible to generalise about the time necessary to guarantee a successful transition, it is certainly possible to draw conclusions about unrealistic schedules. The sequence of steps identified in Table 2 of section 2 clearly indicate that a period of at least 18months beyond that date on which the RAR is identified is not conducive to an orderly transition.

EACH Members very much welcome international efforts in the transition towards risk-free rates and strongly urge authorities contemplating the start of the journey to take into account all the stages identified in this document and to place an emphasis on orderliness and control of risks, rather than speed, to maximise the likelihood of a smooth and successful transition.

5. Appendix: TOIS Cessation

The transition in the Swiss market from TOIS to SARON is by a significant margin the shortest of the examples provided. It is therefore worth examining this experience in more detail.

First, we note that TOIS was very much a secondary benchmark, accounting for only a small fraction (2-3% by Notional Amount, <1% by TradeCount) of cleared swap activity in the years leading up to cessation. This has direct and obvious implications regarding the scale of the transition required, making it smaller across a range of metrics: number of affected types of firms, number of affected firms within each type, value at risk for each firm and so on.

Second, TOIS was used very little outside the wholesale financial markets, for example with effectively no use in retail products for which CHF LIBOR dominated. The direct and obvious implication is the that impact of TOIS cessation was very much more limited than for a more pervasive benchmark. Whole sets of stakeholders, and whole sets of suppliers / providers to those stakeholders, were entirely unaffected by the cessation.

Third, there was no conversion process in cleared swaps, but rather there was a more disruptive close-out. In this, each and every individual TOIS swap had to be terminated at a price negotiated between the counterparties. This was only possible due to the very small number of trades outstanding in the immediate run-up to cessation. Clearing eligibility for SARON swaps was only made available once all TOIS swaps had been eliminated from clearing. Use of this close-out approach allowed the market to side-step the problem that SARON was not established as a fallback to TOIS in a contractual context, but the lack of this relationship had other problematic connotations outside of cleared swaps.

Fourth, the major role of TOIS rates in the swap markets was as an input to the valuation of CHF LIBOR swap trades, both cleared and non-cleared. This role was arguably bigger than the stand-alone role of TOIS. This had important consequences. The fact that TOIS swap rates were no longer available meant it could no longer serve in this valuation role. This did not affect cleared swaps, since by this stage they had been closed out. but the absence of a contractual successor created a number of issues in the uncleared derivatives markets. Agreement over an alternative, and therefore of applicable value transfers, was hard to reach, leading to widespread disputes. These disputes affected large CHF LIBOR portfolios, and were felt internationally.