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1. What is this Guide and who is it for?

Globally the reference interest rates for contracts in Singapore Dollars (SGD), US Dollars (USD), British Pound and other currencies are being replaced. This is a fundamental shift in the way business financing works and will impact virtually all businesses in Singapore – from large listed companies to small-to-medium enterprises (SMEs) – collectively referred to as ‘corporates’ in this guide.

In the SGD interest rate market, corporates that have exposure to SGD Swap Offer Rate (SOR) products (including loans, bonds and derivatives) will be directly impacted, as there will be a change in the basis for calculating interest payable and receivable for these contracts. SOR is not expected to exist as a reference rate after the end of 2021, and is being replaced by an alternative rate, the Singapore Overnight Rate Average (SORA).

As the industry prepares for this, there are published interim milestones that will mean that new SOR products will be phased out (and so will not be available to you) by the end of April 2021.

This guide covers:
- the background to changes in the SGD interest rate market as we move to SORA, the specific concepts involved and how this impacts you as a corporate.
- changes to common SGD denominated products – loans, bonds and derivatives, and
- actions we recommend for you to mitigate disruption risk to your business.

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We recommend that SMEs and large corporates read this guide, before going through the following more detailed resources provided by the Steering Committee for SOR Transition to SORA (SC-STS).

- the **Overview on the Usage of SORA in Loans**, which explains why and how SORA is appropriate for use in loans. Taking on board corporate and retail customer feedback, this document also explains the different ways SORA should be used to calculate interest payments (i.e. in-advance vs in-arrears) in different types of loan products (trade finance, term loans, etc)

- the **SORA Market Compendium** (the “Compendium”), which provides details of technical guidance of SORA derivative, loan and bond product and sample contract templates or market conventions

- the **SC-STS End-user Checklist on Benchmark Transition** ("corporate user checklist") which provide guidance on practical considerations for you as the corporate user in managing the transition away from SOR, and


This guide is for informational purposes only and not intended to be (and should not be taken as) a source of professional legal or financial advice. Readers are encouraged to independently consult their bankers, own professional advisers or experts if they wish to obtain advice on any topic discussed in this guide or other material referenced. Additionally, if a corporate has a loan exposure that is hedged, they are strongly encouraged to speak to their bank early, as the implications of SOR to SORA transition on hedges is complex.

We would like to thank PwC Singapore for their significant effort in contributing to this guide.
2. An overview of interest rate benchmark reforms in Singapore

2.1. What are the changes to Singapore interest rate benchmarks?

Globally, the variable rates that your business may use in determining interest payable or receivable on loans, derivatives and bonds are being replaced. This is expected to mean the end of LIBOR, SOR and a number of other global Interbank Offered Rates (‘IBORs’) by end of 2021.

Regulators, and the financial services industry have established ‘risk free reference rates’ (RFRs) to replace these benchmarks. RFRs are based on overnight borrowing rates as opposed to LIBOR or SOR which are typically based on bank quotes for 1 month, 3 month or 6 month borrowing rates.

In Singapore, the Singapore Interbank Offered Rate (“SIBOR”) and SOR served as key interest rate benchmarks for decades for different users. SOR is predominantly used in bonds and loans to large institutions with hedging requirements, while SIBOR is mainly referenced in banking products for small businesses and retail customers. There is a separate consultation on the future of SIBOR that has just been completed and more information will be published in due course.

SOR represents the implied SGD cost of borrowing if USD are borrowed for the same maturity, and then swapped to SGD. As USD LIBOR is expected to be discontinued after December 2021 and is a key input in calculating SOR, SOR will also be discontinued at this time. The ABS and the SFEMC have identified SORA as an appropriate rate that no longer relies on USD foreign exchange markets, and is based on overnight borrowing transactions in Singapore Dollars.

2.2. What is SORA and how is it different?

SORA is the volume-weighted average rate of overnight, unsecured borrowing transactions between banks in the Singapore cash market. A key benefit of SORA is that it is underpinned by actual transactions in a deep and liquid overnight interbank market. The table below sets out in simple terms the key differences between SORA and SOR.

---

3 London Inter-bank Offered Rate

4 Roadmap for Transition of Interest Rate Benchmarks: From SGD Swap Offer Rate (SOR) to Singapore Overnight Rate Average (SORA)
### Summary of key differences – SOR and SORA

<table>
<thead>
<tr>
<th></th>
<th>SOR</th>
<th>SORA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is it</strong></td>
<td>Effective rate of borrowing SGD for typically 1, 3, or 6 months(^5) by ‘synthetically’ borrowing USD and swapping into SGD</td>
<td>Average rate of overnight SGD cash market transactions</td>
</tr>
<tr>
<td><strong>How is it calculated</strong></td>
<td>Volume-weighted average rate of USD to SGD FX swap transactions, with USD LIBOR as an input</td>
<td>Volume-weighted average rate of borrowing transactions in the unsecured overnight interbank SGD cash market</td>
</tr>
<tr>
<td><strong>Who administers the rate</strong></td>
<td>ABS Benchmarks Administration Co Pte Ltd</td>
<td>Monetary Authority of Singapore (MAS)</td>
</tr>
<tr>
<td><strong>What is the tenor</strong></td>
<td>Rate published for various maturities: Overnight, one month, three months and six months. This is the rate at which banks borrow to pay back 1, 3, or 6 months later.</td>
<td>Overnight rate. This is the rate at which banks borrow to pay back the next day</td>
</tr>
<tr>
<td><strong>Does the rate include credit risk</strong></td>
<td>SOR incorporates interbank credit spread through its use of USD LIBOR, which measures unsecured lending over agreed periods of time in USD. In layman's terms, lending to another party for 1, 3 or 6 months carries a risk that they will not pay you back. As such, a 'credit spread' or premium is included in the interbank lending rate to compensate for this risk.</td>
<td>Generally viewed as nearly free of credit risk (“near risk-free” rates). The short tenor (overnight) lending has minimal credit risk and therefore minimal credit spread. In layman’s terms, lending to a party that is “alive and well” today means it is very likely they will be “alive and well” tomorrow to pay you back.</td>
</tr>
</tbody>
</table>

\(^5\) Overnight SOR also exists, but 1, 3, 6 month SOR are the tenors most widely used
3. Key Concepts – Moving to SORA

In this section, we highlight key concepts that are changing as we move to SORA.

3.1. ‘Forward’ and ‘Backward’ looking interest rates

Contracts referencing SOR today are typically “forward looking”, in the sense that your next interest payment is also determined in advance (say 1, 3 or 6 months). At the start of the next period, the interest rate is ‘reset’ to a new rate for the next 1, 3 or 6 months.

For many borrowers, this means that you:
- know at each reset point, say at 1 October 2020, what your next interest payment will be, say on 31 December 2020; and
- this rate does not change between 1 October 2020 and 31 December 2020.

In comparison, SORA and other global overnight reference rates measure the rate of interest for banks borrowing money for one business day. Nonetheless, for corporate contracts interest payments will continue to be made every 1, 3 or 6 months rather than requiring daily interest payment. To determine interest amounts for a 3 month period, for instance, overnight reference rate contracts will compute interest payable on a ‘backward looking’ or ‘in arrears’ basis.

This means that:
- the future interest payable is not known at each reset point. On 1 October 2020, for instance, the next interest payment will be on 31 December 2020 for an amount based on the daily interest rates between 1 October 2020 and 31 December 2020; and
- the interest rate changes every business day between 1 October 2020 and 31 December 2020. The amount of interest payable on 31 December 2020 is the compounded average of each business day rate in this period. This is referred to as ‘Compounding in Arrears’.

<table>
<thead>
<tr>
<th>‘Forward looking’ (in advance)</th>
<th>‘Backward looking’ (in arrears)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="#" alt="Diagram" /></td>
<td><img src="#" alt="Diagram" /></td>
</tr>
<tr>
<td>Interest amount ‘fixed’ or pre-determined for 3 months and known today</td>
<td>Interest payable only known at T + 3 months</td>
</tr>
</tbody>
</table>
3.2. SORA: Compounding in arrears vs in advance

There are two broad mechanisms for determining interest payable for SORA products: Compounding in arrears and compounding in advance.

Compounding in arrears means the calculation of interest using the daily SORA rate available during the interest period leading up to the interest payment date (as discussed above) and then compounded daily. Such calculations will require businesses to consider the operational implications, such as payment systems and cashflow management, as there is no certainty of interest payable at the start of the interest period.

As a corporate user, you may be worried about whether you will have sufficient time to cover interest amounts that are determined so close to interest payment date. The industry has developed different payment conventions that may be applied for SORA compounded in arrears products that create a short ‘time lag’ (typically a few days) between the date that interest amounts are known and the dates they are paid. These are summarised in Appendix 1 and recommended conventions for

Compounding in advance means the calculation of interest using the compounded average of daily SORA rates from a prior period. As an example, for monthly interest payments due at the end of January, the compounded average of daily SORA readings from 1 to 31 December could be used.

As such, you will know the interest amount due one month in advance of payment, this is the same amount of advance notice that borrowers are familiar with in the SOR market today.

These two approaches are compared below to SOR payments today.

The MAS publishes a daily SORA Compounded ‘Index’ as well as the 1 month, 3 month and 6 month compounded average of SORA to aid users of this rate.

The published 1 month, 3 month and 6 month Compounded SORA and SORA Index means that most corporates will not have to calculate compounded SORA averages themselves.

6 Methodology document for Compounded DORA and SORA Index can be found at Compounded Singapore Overnight Rate Average Index (“SORA Index”), Compounded SORA and MAS Floating Rate Note (“MAS FRN”) a user guide https://www.mas.gov.sg/-/media/MAS/FRN/User-Guide-for-SORA-Index-Compounded-SORA-and-MAS-FRN.pdf?la=en&hash=D0CBE1D9347E339AFAA7694C586EA7707A7DEB48
3.3. SORA: adjustment spread

SORA is not economically the same as SOR. There are two key differences between the two:

- As SORA is an overnight near risk free rate, it does not include a credit premium (other than the overnight interbank credit risk) that is priced in for SOR; and
- Apart from credit risk, SOR reflects the cost of lending money for a longer period of time (typically 3 months) whereas SORA is an overnight rate. There is a ‘term’ or tenor adjustment required to compare these.

The diagram below illustrates the change from the way you are likely to see variable contracts today, versus how they may be reflected if replaced with SORA.

It is expected that the above spread adjustments will be incorporated in the customer spread upon transition to SORA for new contracts.
4. Dealing with legacy SOR contracts

In this section we introduce key concepts as you look to deal with your existing (legacy) contracts that reference SOR and may mature after 2021.

4.1. Contract ‘Fallbacks’

Many existing SGD financial contracts have a ‘back up’ clause that is intended to cover instances when SOR is temporarily unavailable. These clauses are commonly referred to as ‘fallbacks’. In Singapore, a common fallback rate for loan contracts is the ‘Cost of Funds’ of the bank lending the money.

Given that the SOR discontinuation after end-2021 will be a permanent event, existing fallback language may not be appropriate for you because:

- the fallback rate may not be economically equivalent to SOR, and
- the fallback rate may not be easily hedged.

The SC-STS has set out suggested fallback guidance in the Market Compendium, which is summarised in Section 5 for different products.

4.2. Fallback Rate (SOR)

For SOR derivatives and loans, ‘Fallback Rate (SOR)” is the primary fall back reference rate. Like SOR, Fallback Rate (SOR) is derived from the USD and SGD forward exchange rates – but with USD LIBOR replaced by Fallback Rate (SOFR), the contractual fallback rate for USD LIBOR.

Unlike SOR, Fallback Rate (SOR) will be published in arrears, at the end of the interest period. Corporates amending existing contracts through fallback language should take note of the need to prepare systems and operational changes arising from the shift from SOR as a rate known in advance to Fallback Rate (SOR) which is published in arrears.

Fallback Rate (SOR) is intended solely as an interim fallback arrangement (with a limited shelf-life of about 3 years starting from when SOR is discontinued), and is not intended for use in new contracts.

We recommend that you re-paper contracts to SORA where possible to avoid having a large number of contracts referencing SOR, or Fallback Rate (SOR) in the near future. Where possible, it is easier to transition from SOR to SORA now, than from SOR to Fallback Rate (SOR) and then transition to SORA later.

7 Fallback Rate (SOR) was previously referred to as Adjusted SOR
8 Fallback Rate (SOR) is also part of the waterfall recommended fallback rates available for bonds and other floating rate notes as set out in Section 5.
5. Product Changes and Features

This section provides an overview of the key aspects of the transition from SOR to SORA in derivatives, loans and bond products. Further detail and templates on product confirmation terms are set out in the Compendium.

5.1. Derivatives

<table>
<thead>
<tr>
<th>Which products are impacted?</th>
<th>SGD contracts referencing SOR, typically:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• fixed-for-floating SOR interest rate swaps</td>
</tr>
<tr>
<td></td>
<td>• floating-for-floating SOR-USD LIBOR cross currency basis swaps, and</td>
</tr>
<tr>
<td></td>
<td>• other SOR derivatives, including forward starting contracts and options.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New contracts referencing SORA</th>
<th>• New derivative contracts will reference SORA instead of SOR with interest calculated <em>compounded in arrears</em>.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Whilst SORA derivatives can be written today, new SORA derivatives transactions from 25 January 2021 under an ISDA Master Agreement will incorporate the 2006 ISDA Definitions, including the ISDA supplement that defines the way that SORA is calculated. In practice, corporate users can use the MAS published SORA index for this calculation.</td>
</tr>
<tr>
<td></td>
<td>• SC-STS has published template confirmations for products such as an overnight interest rate SORA swap, USD floating SOFR to SORA swap and SOR-to-SORA basis swap.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected SORA Payment Convention (new contracts)</th>
<th>• Payment Delay of 2 Singapore Business Days. Refer to Appendix A for a summary of these terms.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>What about existing SOR derivatives?</th>
<th>• ISDA has published the ISDA 2020 IBOR Fallbacks Protocol to facilitate the amendments of existing derivative transaction fallbacks to Fallback Rate (SOR).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• For SOR derivatives entered after 25 January 2021 under the ISDA IBOR Fallbacks Supplement, the fallback is Fallback Rate (SOR).</td>
</tr>
<tr>
<td></td>
<td>• The fallback for SOR will be triggered if there is a permanent discontinuation of USD LIBOR, or if the Financial Conduct Authority in the UK (FCA) decides that USD LIBOR is no longer representative.</td>
</tr>
</tbody>
</table>

Corporates are encouraged to engage professional advisers to decide whether or not to sign up to the ISDA 2020 IBOR Fallbacks Protocol to assist with updating existing SOR contracts.
### 5.2. Capital markets products (bonds)

<table>
<thead>
<tr>
<th>What products are impacted?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Floating rate securities;</td>
</tr>
<tr>
<td>• Resettable fixed rate securities, such as perpetual / hybrid securities; and</td>
</tr>
<tr>
<td>• Capital instruments issued by banks, such as Tier 2 or Additional Tier 1 securities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New contracts referencing SORA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Forward looking Term SORA⁹, if available, would be the preferred benchmark rate. Currently, in the absence of Term SORA, SORA compounded in arrears is the recommended benchmark.</td>
</tr>
<tr>
<td>• Credit and term adjustment spreads are to be individually determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected SORA payment convention (new contracts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lookback with observation shift and lookback without observation shift have been adopted for certain securities issued referencing SORA. Refer to Appendix A for a summary of these terms.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What about legacy SOR contracts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The compendium contains ‘Recommended SOR Fallback Replacement Language’ that has already been incorporated by some issuers from end 2019. The fallback hierarchy when SOR is no longer deemed to be representative is:</td>
</tr>
<tr>
<td>♦ Term SORA (if available), otherwise</td>
</tr>
<tr>
<td>♦ Compounded SORA, otherwise</td>
</tr>
<tr>
<td>♦ Other alternative rates.</td>
</tr>
<tr>
<td>• This is a different fallback hierarchy than for derivative products that refer to “Fallback Rate (SOR)”. Issuers who hedge may want to amend bond fallbacks to match the derivative fallbacks as issued by ISDA, or may consider a customised derivative with terms that align with bond fallbacks.</td>
</tr>
<tr>
<td>• Issuers should use the guidance of their professional advisors when an adjustment spread is required to be applied to the benchmark replacement. As of the date of this guide, alternatives and suitable methods on how Adjustment Spread will be determined are being explored and deliberated upon.</td>
</tr>
<tr>
<td>• Legacy bond products are less standardised from a contractual perspective than derivatives under ISDA. As such, for certain legacy bond products there may be no fallbacks.</td>
</tr>
<tr>
<td>• Some legacy products may contain a final fallback provision providing that, absent any other intervention, the interest rate used for the ‘last preceding interest period’ would be used for the next interest period. This effectively converts floating rate securities to fixed rate securities.</td>
</tr>
</tbody>
</table>

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Issuers are encouraged to discuss early with their professional advisors the effectiveness of legacy fallback language to determine if terms should be amended to reflect the original intention of the contracts.

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⁹ Term SORA will look similar to SOR in that it is a forward-looking rate, based on what the market expects SORA to be in the future over the next 1, 3 or 6 months. The feasibility of term-SORA will depend on the existence of a deep and liquid SORA derivatives market, which would take time to develop.
5.3. Corporate loans

| What products are impacted? | • Floating rate bilateral loans  
|                            | • Syndicated loans |
| New contracts referencing SORA | • It is recommended that new contracts reference **compounded in arrears** SORA.  
|                            | • For SMEs, compounded in arrears is also recommended. However, for simplicity or payment certainty and when hedging is not required, alternatives such as compounded SORA in advance or bank-administered rates can be considered. |
| Expected SORA loans payment convention (new contracts) | • The SC-STS recommends a 5 Business Day ‘Lookback with Observation Shift’ or 5 Business Day ‘Lookback without Observation Shift’. Refer to Appendix A for a summary of these terms. |
| What about legacy SOR loan contracts? | • Contracts for bilateral and syndicated loans are less standardised than derivative contracts under ISDA.  
|                            | • For SOR bilateral loans, the recommended fallback would be in the following hierarchy:  
|                            | ♦ Fallback Rate (SOR), otherwise  
|                            | ♦ Recommended fallback rate by MAS or a committee officially endorsed or convened by MAS plus the Benchmark Replacement Adjustment\(^\text{10}\), otherwise  
|                            | ♦ A replacement rate that is agreed between the Lender and the Borrower plus the Benchmark Replacement Adjustment.  
|                            | • Primarily for syndicated loans, the Replacement of Screen Rate Clause ("RSR Clause"), published by the Loan Market Association and endorsed by the Asia Pacific Loan Market Association, aids the transition to SORA by lowering the thresholds for borrower consent required to make such transition. The RSR Clause does not provide operative provisions which will apply when the rate changes to SORA, so additional amendments will need to be made.  
|                            | • We recommend that you re-paper contracts to SORA where possible to minimise the number of contracts referencing SOR or Fallback Rate (SOR) in the near future. |

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**Borrowers should discuss existing loans with maturities beyond 2021 with their lenders early and where borrowers have loan exposures that are hedged engage your banks early as the implications of SOR to SORA transition on hedges is complex.**

\(^{10}\) **Benchmark Replacement Adjustment** is defined within SORA Market Compendium: Transition from SOR to SORA [https://abs.org.sg/docs/library/sora-market-compendium-on-the-transition-from-sor-to-sora.pdf](https://abs.org.sg/docs/library/sora-market-compendium-on-the-transition-from-sor-to-sora.pdf)
6. What should businesses be doing?

6.1. Corporate user checklist
A pair of corporate user checklists have been published on practical considerations for the transition away from SOR. Your business’s exposure to SOR determines which checklist to use.\(^{11}\) We have set out the key elements of the work programme below.

<table>
<thead>
<tr>
<th>Workstream</th>
<th>What you should do</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project set up and governance</strong></td>
<td>• Implement a governance framework to oversee the SOR transition. Depending on the scale of the business, this will include appointing a project lead / responsible executive and defining periodic reporting to Board Directors and Senior Management.</td>
</tr>
</tbody>
</table>
| **Quantify SOR exposures**                     | • Establish an inventory of SOR-linked exposures.  
• Define a strategy to reduce reliance on SOR for new transactions.                                                                                                                                                                                                                                                                                                                                                                                |
| **Contract inventory and analysis**            | • Review and establish an inventory of existing SOR contracts maturing post 2021, identify contract ffailbacks and assess their impact.  
• Begin a dialogue with internal and external counterparties to:  
  ♦ renegotiate or repaper existing contracts; and  
  ♦ transition to SORA on new contracts.                                                                                                                                                                                                                                                                                                                                              |
| **Assess operational and system impacts**      | • Assess adequacy of systems and operational processes (such as settlement) to move to ‘backward looking’ rates with different conventions (payment delay, observation shift, compounded in advance), or compounded in advance.  
• Begin a dialogue with external vendors to implement changes.  
• Consider how frequently rates are collected and use the of indices or published compounded rates such as the Compounded SORA Rate and SORA Index.  
• Consider downstream impact to control and process documentation.                                                                                                                                                                                                                                                                                                               |
| **Assess tax and accounting implications**     | • Consider accounting relief provided by IASB\(^{12}\) and SC-STS guidance.  
• Engage auditors and tax advisors early.  
• Consider disclosure obligations to customers and investors, for example in bond issuances and annual reports.                                                                                                                                                                                                                                                                                                                         |
| **Assess treasury risks (corporates with hedging)** | • Consider treasury economic and cashflow “mis-match” risks in assessing choices for loan and derivative conventions  
• Assess impact to valuation and pricing models.                                                                                                                                                                                                                                                                                                                                                                                                  |

\(^{11}\) Checklist 1 is applicable for corporates with limited borrowings and no derivatives, including SMEs. Checklist 2 covers corporates with more extensive dealings in derivatives, multiple borrowings or bond investments /issuances.

\(^{12}\) International Accounting Standards Board
7. Key takeaways

Highlighted below are some of the key takeaways for you as you transition to SORA.

For **borrowers**, we recommend you:

- Understand and assess the published Compounded SORA and the SORA Index for your business to determine future contract interest payable/receivable on SORA.
- Plan to minimise the number of contracts referencing SOR or Fallback Rate (SOR) in the near future, for example by re-papering contracts to SORA where possible.
- Discuss existing loans with maturities beyond 2021 with lenders early.
- Leverage the user checklists to prepare for the wider business impacts of this change.

In addition, for **issuers** of floating rate products, we recommend you:

- Discuss early with professional advisors the effectiveness of legacy fallback language to determine if terms should be amended to reflect the original intention of the contracts.
- Consider disclosure obligations to investors in new prospectus documents.

For **corporates using hedging** product, we recommend you:

- Engage your bankers or professional advisors to decide whether or not to sign up to the ISDA 2020 IBOR Fallbacks Protocol which may assist in updating existing SOR contracts.
- Assess the ‘mismatch risks’ from hedging with new rates, which should inform the discussion with banks on the conventions for loan (or bond) and derivative products.
- Engage your banks early as the implications of SOR to SORA transition on hedges is complex.
**Appendix 1. Summary of payment conventions**

<table>
<thead>
<tr>
<th>Convention</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lockout period</strong></td>
<td>Within the interest period, the rate for the last few days is ‘frozen’ (the “Lockout Period”) at the last observed daily rate. For users that hedge, there may be a short mis-match for interest rate movements during the lock-out period unless the derivative matches this.</td>
</tr>
<tr>
<td><strong>Lookback without observation shift</strong></td>
<td>The day’s interest rate is replaced by the rate a few business days ago. As such, the 3 month interest (in this example) is known a few days before the end of the interest period. While recommended for SORA loan products, this mechanism is not supported by the published SORA index or SORA compounded rates.</td>
</tr>
<tr>
<td><strong>Lookback with observation shift</strong></td>
<td>As above, except the entire interest period is also shifted to align with the interest observation period. Recommended for SORA loan products. Hedging using derivatives under this option would require less customisation. Compatible with the published SORA compounded index.</td>
</tr>
<tr>
<td><strong>Payment delay</strong></td>
<td>Interest payments are delayed by an agreed number of business days after the end of the interest period. Could lead to a mismatch of cash flows and may be difficult to handle operationally.</td>
</tr>
</tbody>
</table>

**Key**
- ◆ Interest reset date
- ▲ Interest payment date

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13 For capital market products, in the last interest period the interest payment is due after the repayment of the principal amount. This could lead to a mismatch of cash flows and may be difficult to handle from an operational and credit risk perspective. To overcome this, the Payment Delay approach is sometimes combined with a Lockout Period approach for the final interest period. In this combined approach, the SORA rate will be “frozen” a certain number of days prior to the final interest period so that the final interest payment can be made on the same day as the repayment of the principal amount.

As of the date of this guide, no capital market products referencing SORA has selected such option.