



ASX Secured Overnight Funding Index Australia (SOFIA™) Methodology

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DRAFT

Contacts

For general enquiries,
please contact:

T 131 279
rates@asx.com.au

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1. Overview.

The Australian Repo market is a key short term funding market that plays an integral role in the Australian Financial Markets. The majority of local Repo transactions occur in the overnight bucket (average duration 1-2 days) with activity also observed out to 3-months.

The development of an overnight Repo reference rate would increase transparency and bring diversity to the Repo market by encouraging participation from a broader subset of market users. There is currently no secured benchmark published in Australia. The introduction of a Repo Rate will complement existing unsecured and risk free benchmarks (BBSW and Realised AONIA) giving market participants a range of options when using interest rate benchmarks.

2. About SOFIA™

The Secured Overnight Funding Index Australia (SOFIA™), seeks to measure overnight General Collateral (GC1) funding in Australian dollars using transactions in Commonwealth and Semi Government bonds, Treasury Notes and Commonwealth and Semi Government Indexed bonds.

The SOFIA™ Beta version will be published for a period of 6 months with the rates updated, weekly in arrears. The Beta version of SOFIA™ will include both the calculated rate and the associated eligible volume for each day over the defined period.

Upon completion of the initial Beta version, ASX benchmarks will continue bi-lateral engagement with the market. Based on the feedback of the market engagement, further refinements of the methodology may be undertaken with a view to produce a productionised standard version of SOFIA™ at a future date to be determined.

ASX Benchmarks invites feedback on the DRAFT methodology and performance of the Beta version SOFIA™. The Beta version will be published [here](#).


3. Purpose of the SOFIA™ Beta Version.

ASX is publishing the Beta SOFIA™ Rate for an initial testing period, solely for information and testing purposes, in order to enable recipients to evaluate the settings and provide feedback. The Beta SOFIA™ Rate is not intended for, and ASX expressly prohibits its use for, any other purpose, including as a reference, index or benchmark in a financial instrument or financial contract. It should not determine the amount payable under a financial instrument or financial contract and it should not measure the performance of an investment fund.

ASX will announce in due course when the Beta SOFIA™ rate will be made available for use in financial instruments.

4. SOFIA™ Rate Inputs and Conventions

Component	Detail
Data input	Overnight Repo transactions in General Collateral 1 (GC1) securities that are settled in Austraclear
General Collateral	General Collateral is defined as GC1 in the AFMA Repo Conventions and includes AUD Commonwealth and Semi Government bonds. Treasury Notes and Commonwealth and Semi Government Indexed bonds.
Settlement date	Only Repo transactions that are traded and settled on the same day, i.e. the trade date is the same as the first leg settlement date (excluding TomNext)
Settled trades	No at call trades will be used. Only settled trades will be used

Excluded trades	All repo trades where the Reserve Bank of Australia (RBA) are counterparty to the trade are excluded from the calculation	
Business days	A business day is any day that banks are open for business in Sydney.	
Rounding	Rounded to 4 decimal places.	
Publication	For the purposes of the Beta version, the SOFIA™ rate will be published weekly, in arrears on the ASX Benchmarks page for a period of 6 months.	

5. SOFIA™ Calculation Methodology

Calculation	Description
Eligibility Criteria	<p>The Administrator determines the Repo Rate for the overnight tenor by compiling all eligible transactions.</p> <p>The eligibility criteria is defined below:</p> <ul style="list-style-type: none"> • General Collateral 1 (GC1) Overnight repo transactions settled in Austraclear are eligible • Transactions with trade date on the same date as its 1st leg settlement date (excluding TomNext) • No At-call trades, only settled trades • No trades where the RBA (Reserve Bank of Australia) are a counterparty • No minimum number of trades or participants is applied • No minimum volume threshold is applied <p>As consistent with other Global Risk Free Rates, the data is filtered further to account for what are known as “specials”.</p> <p>The filtering sequence is outlined below</p> <ul style="list-style-type: none"> • All eligible transactions, as defined above, are sorted based on their yield from highest to lowest • A filter is applied to include the top 75% of the transaction volume • A Volume Weighted Average Price is then applied to the filtered dataset <p>After the filtering has been applied to all eligible trades, The VWAP calculation is performed using the following equation:</p>
VWAP methodology	$RFR = \sum_{i=1}^n Rate_i \times \frac{Volume_i}{Total\ Volume}, \text{ for transactions } i = 1 \text{ to } n$ <p>Where: n= total number of transactions</p> <p>A worked example of the Draft SOFIA™ methodology can be found below</p>

Yield	Volume	Inputs incl/excl	RFR Contribution	RFR
4	10	10	$4 \times 10 / 37.5 = 1.07$	2.8
3	10	10	$3 \times 10 / 37.5 = 0.8$	
2	20	17.5	$2 \times 17.5 / 37.5 = 0.93$	
		×		
1	10	×	0	

25% of volume discarded

In the above example, the transactions are ranked by yield (highest to lowest) with no aggregation. The top 75% of transaction volume is included with the bottom 25% of volume discarded. A VWAP calculation is then applied to the eligible 75% of volume.



Disclaimer

ASX Benchmarks Pty Limited ABN 38 616 075 417 and its related bodies corporate ("ASX") makes the Beta version of the SOFIA™ overnight repo reference rate ("Beta SOFIA Rate") available for download from the ASX Benchmarks webpage on the following conditions.

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Feedback on the Beta SOFIA™ Rate should be sent to rates@asx.com.au

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