



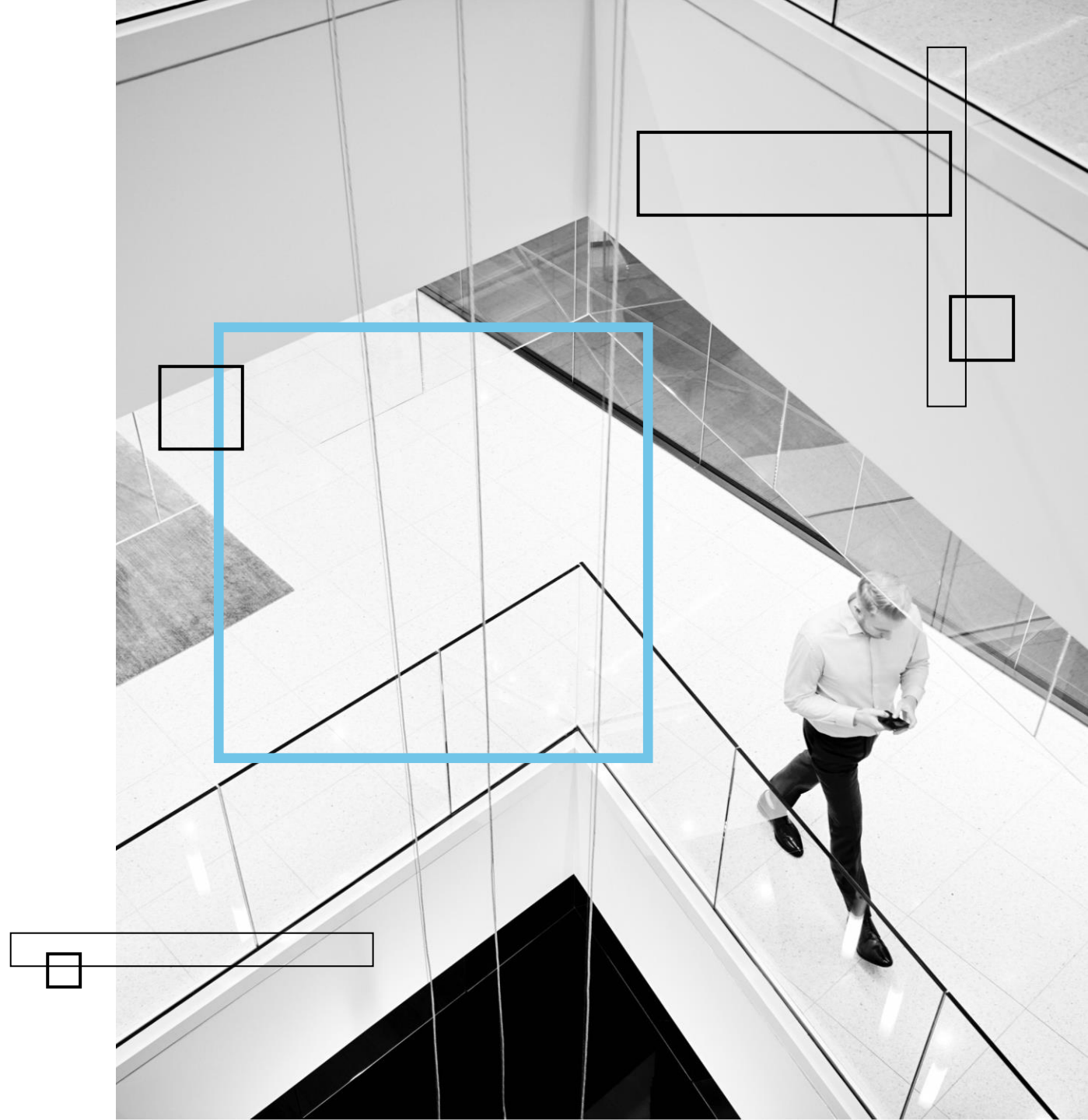
# ICE Term SOFR Reference Rate

Tim Bowler

President

ICE Benchmark Administration

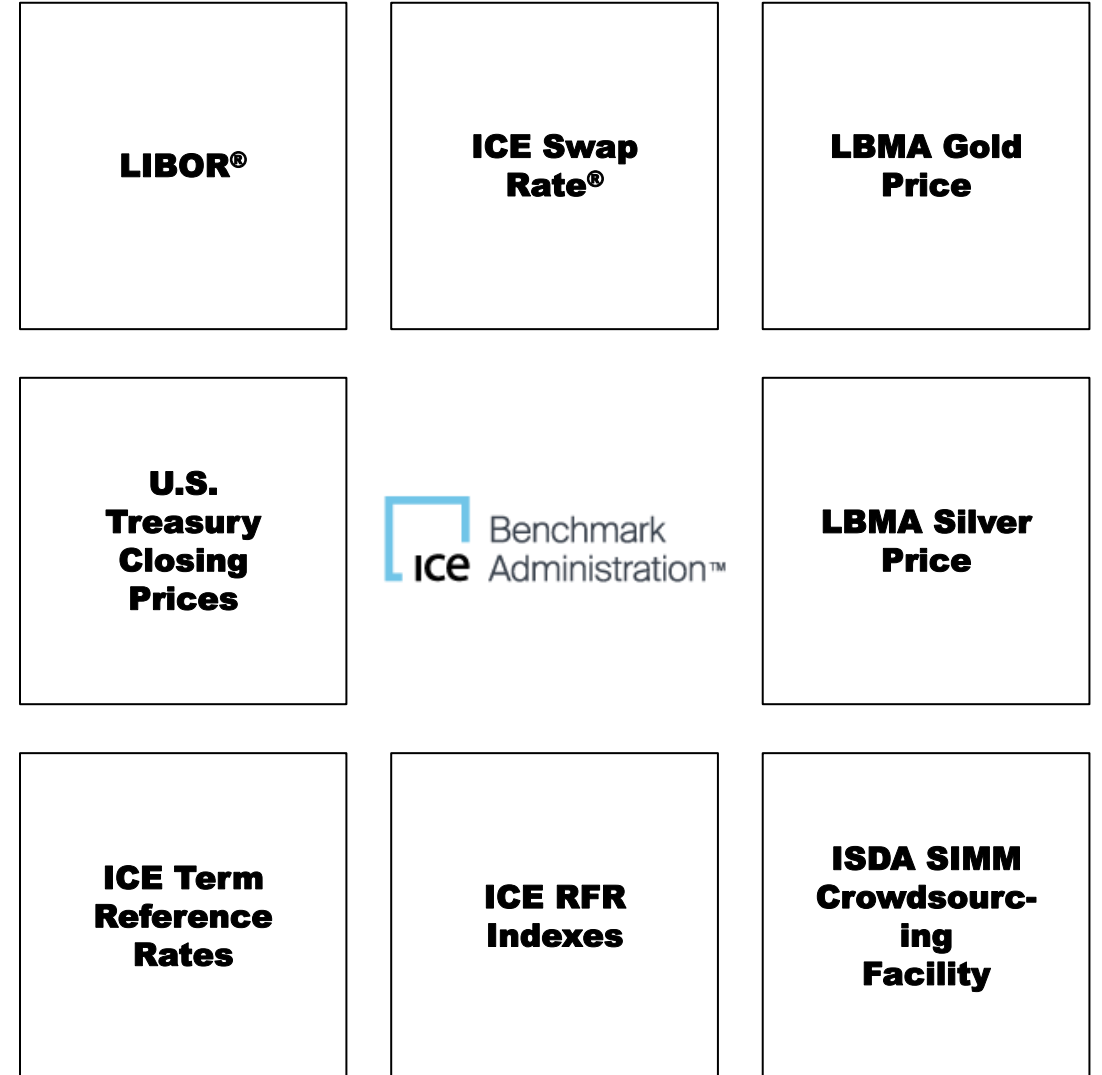
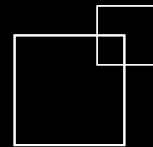
June 27, 2022



# ICE Benchmark Administration®

ICE Benchmark Administration (IBA) was established in 2013 as an independent entity in order to provide important, widely-used benchmarks and key market services that help facilitate transparent and well functioning markets.

IBA has been authorised as a benchmark administrator under applicable regulation since February 2014. Benchmark administration is at the core of what IBA does. We do not operate any other businesses that could potentially conflict us.



# ICE Term Reference Rates

Two Approaches Published Daily

---

## Realized Rates / Indexes

---

- Realized risk free rates (RFRs) sourced from published data over certain set time periods (i.e. one month, three months, etc.);
  - Simple average;
  - Compounded in arrears; and
  - RFR Indexes
    - USD SOFR
    - GBP SONIA
    - EUR €STR
    - JPY TONA

## Forward-Looking Term Rates

---

- **Forward-looking RFRs** based upon derivative contracts traded in financial markets that reference the new RFR rates and that can be used to predict where the RFRs will average over certain set time periods.



# Why Develop Term Rates and Indexes?



## Certainty

- Term rates help businesses, borrowers and lenders who seek a forward-looking benchmark to provide certainty when calculating their interest expenses and other contractual payments in advance



## Access

- Not all market participants have access to the derivatives market to hedge their exposures



## Transition

- Launching Term Reference Rates as benchmarks is an important step in supporting financial markets in benchmark transition - in particular for cash markets



# ICE Term Reference Rates

Forward-Looking Term Rates

---



## **IBA has developed forward-looking Term Rates in accordance with:**

- Principles laid out by the FSB OSSG
- Goals put forth by the Official Sector<sup>1</sup>
- The BMR (the European Union and UK benchmarks regulations)

---

<sup>1</sup> Sterling Risk Free Rates Working Group and Alternative Reference Rates Committee (ARRC)



## **IBA has launched;**

- ICE Term SONIA Reference Rates (ICE TSRR)
- **ICE Term SOFR Reference Rates (ICE Term SOFR)**

*For use as benchmarks in financial instruments by IBA licensees*

# ICE Term Reference Rates Methodology



## Leveraging

- Leverages existing and trusted infrastructure and benchmark methodology (ICE Swap Rate) to be able to produce term settings that are robust and have sufficient redundancies to ensure daily publication



## Forward Tenor Points

- IBA's ICE Term Reference Rates (ICE TRR) are designed to measure, daily, expected (i.e. forward-looking) risk-free-rates over 1-, 3-, 6-, and 12- month tenor periods



## Waterfall

- Based on a Waterfall methodology<sup>1</sup> using eligible data for specified interest rate derivative products referencing the relevant risk-free-rate

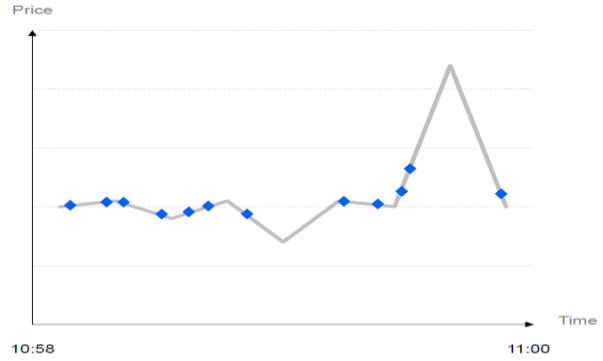


<sup>1</sup> [ICE Term Rates Methodology](#)

# Calculation Methodologies Explored By IBA

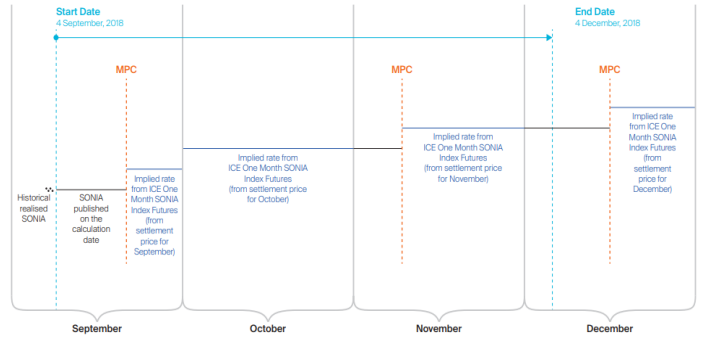
## OIS Based

### ICE Swap Rate-type model

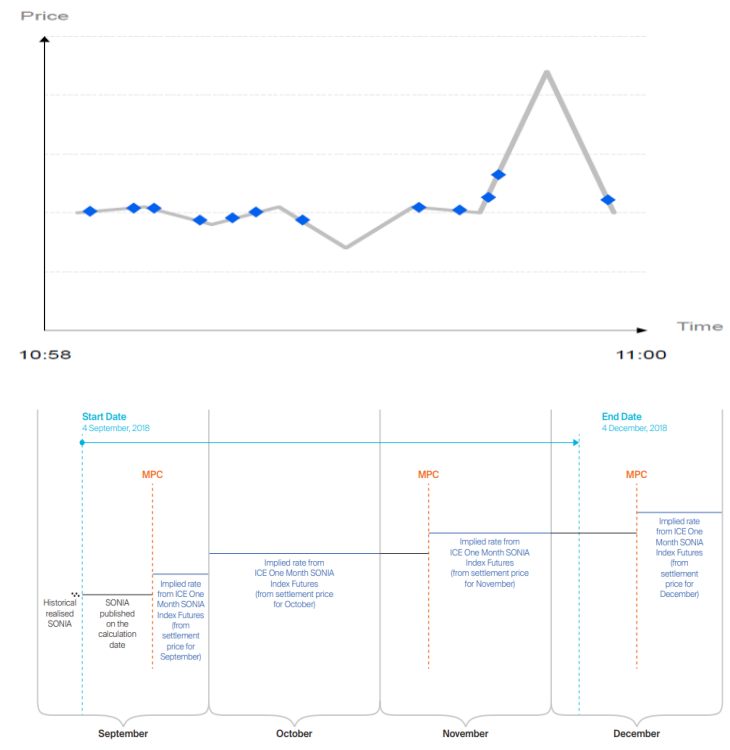


## Futures Based

### Step Function-type model



## Hybrid/Waterfall





# IBA's Approach – Waterfall Methodology

Longer term sustainable solution to produce ICE TRRs complying with BMR and in line with IOSCO Principles

## Level 1

OIS Swaps Data  
(CLOB)<sup>1</sup>



Tradable bids / offers from  
electronic venues



ICE Swap Rate -  
like methodology



Existing benchmark  
publication Infrastructure

## Level 2

OIS Swaps Data  
(D2C)



Dealer to Client data from  
electronic venues



ICE Swap Rate -  
like methodology



Existing benchmark  
publication Infrastructure

## Level 3

Futures Settlement  
Prices



Futures Settlement  
Prices



Step-function  
model



Existing benchmark  
publication Infrastructure

*If there is not enough liquidity for any of the 3 levels of the waterfall, publish previous day's rate*



# ICE Term SOFR Rate - Timeline

---

## ICE Term SOFR

- February 2, 2021 - IBA launches a U.S. Dollar Reference Rates webpage to assist the market with U.S. Dollar LIBOR Transition
  - Webpage includes ICE Term SOFR in Beta form based on SOFR Futures Settlement Price
- February 10, 2022 - IBA launched a Beta version of ICE Term SOFR with Dealer-to-Client OIS data at Level 2 and SOFR Futures Settlement Prices at Level 3
- March 16, 2022 - ICE Term SOFR rate launched as a benchmark for use in financial contracts by licensed users

# ICE Term SOFR Reference Rate

## Summary

	ICE Term SOFR
Tenors	1M, 3M, 6M, 12M
Publication time	11:15 ET
Methodology	Level 1: OIS CLOB Data <sup>1</sup> Level 2: OIS D2C Data Level 3: Derived from SOFR Futures Settlement Prices
Data collection window	120min (9-11am ET)
Availability	Webservices: ICE Report Centre File Transfer Protocol (MFT) (like LIBOR and ICE Swap Rate) Redistributors: Bloomberg and ICE Data Services

10 | <sup>1</sup> – note, level 1 input data will be added for ICE Term SOFR when there is sufficient liquidity from electronic venues



# ICE Term SOFR Reference Rate: Use Cases and Fees

## Use Cases

---

### *Primary*

- Commercial lending and hedging, as appropriate
- Receivables discounting
- Total return benchmarking
- Internal funds transfer pricing
- Etc.

### *Contractual resilience*

- Serve as a “fall-back” rate in financial contracts if another term SOFR rate is used (e.g. if the contractually referenced term SOFR rate is not available or becomes unrepresentative, the IBA rate can be used)
- Avoids having to convert contractual cash flows to overnight SOFR, if a fall back is needed

## Fees

---

- ICE Term SOFR and ICE Term SONIA Reference Rates will not be fee liable until at least January 1, 2024
- In addition to the above, IBA’s RFR Index family is not fee liable



**Thank you**



# Disclaimer

ICE Benchmark Administration Limited (IBA) is authorised and regulated by the Financial Conduct Authority for the regulated activity of administering a benchmark, and is authorised as a benchmark administrator under the UK Benchmarks Regulation. ICE, LIBOR, ICE Swap Rate and ICE Benchmark Administration are trademarks of Intercontinental Exchange, Inc. (ICE) and/or its affiliates. All rights in these trademarks are reserved and none of these rights may be used without a written license from ICE and/or its affiliates, as applicable.

This presentation is not and should not be construed as an offer or agreement to provide any services or to enter into any other transaction or arrangement. This presentation is not, and should not be taken as or relied upon as constituting, financial, investment, legal, tax, regulatory or any other form of advice, recommendation or assurance. IBA reserves the right to amend any aspect of this presentation.

The contents of this presentation, all associated information and all discussions in connection with it are strictly confidential and must not be disclosed, transmitted, distributed or disseminated, either directly or indirectly through any third parties, to any person or entity without the express written consent of IBA. The information and data contained herein constitutes information and valuable property owned by IBA, its affiliates, licensors and/or other relevant third parties. Intercontinental Exchange, Inc. (ICE) and IBA reserve all rights in the methodologies (patent pending) and information and data disclosed in this presentation, and in the copyright in this presentation. None of these rights may be used without a written licence from ICE and/or its affiliates, as applicable.

None of IBA, ICE, or any of its or their affiliates accepts any responsibility or will be liable in contract or tort (including negligence), for breach of statutory duty or nuisance or under antitrust laws or otherwise, or in respect of any damage, expense or other loss you may suffer arising out of or in connection with the information and data contained in or related to this presentation or any use that you may make of it or any reliance you may place upon it. All implied terms, conditions and warranties and liabilities in relation to the information and data are hereby excluded to the fullest extent permitted by law. None of IBA, ICE or any of its or their affiliates excludes or limits liability for fraud or fraudulent misrepresentation or death or personal injury caused by negligence.

IBA reserves all rights in the ICE TRR methodologies and in the ICE TRR settings. The "SONIA" mark is used under license from the Bank of England (the benchmark administrator of SONIA), and the use of such mark does not imply or express any approval or endorsement by the Bank of England. "Bank of England" and "SONIA" are registered trademarks of the Bank of England. IBA is not affiliated with the New York Fed. The New York Fed does not sanction, endorse, or recommend any products or services offered by IBA.

© 2022 ICE Benchmark Administration Limited