



# €STR Forward Looking Term Structure

**Presentation to the Working Group on Euro Risk-Free Rates**

**Stephan Fligel**

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The Financial and  
Risk business of  
Thomson Reuters  
is now Refinitiv.

**REFINITIV™**  


# Introduction to Refinitiv

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- Refinitiv is the former Financial and Risk business of Thomson Reuters
  - Formed on 1<sup>st</sup> October 2018, 55% owned by a Blackstone led consortium and 45% owned by Thomson Reuters
  - Refinitiv is one of the world's largest providers of financial markets data and infrastructure, serving over 40,000 institutions in over 190 countries
  - Refinitiv provides leading data and insights, trading platforms, and open data and technology platforms that connect a thriving global financial markets community - driving performance in trading, investment, wealth management, regulatory compliance, market data management, enterprise risk and fighting financial crime
- Refinitiv is organised into five divisions
  - Trading
  - Investing and Advisory
  - Risk
  - Wealth



# Refinitiv benchmark administration

**Refinitiv is the administrator for 34 benchmarks and the calculation agent for a further 67 benchmarks**

All Refinitiv benchmarks are in alignment with IOSCO principles (<https://www.refinitiv.com/en/financial-data/financial-benchmarks/benchmark-regulation>)

Refinitiv Benchmark Services (UK) Limited (“RBSL”), a wholly owned subsidiary of Refinitiv, is an authorized benchmark administrator and has been regulated in the UK by the Financial Conduct Authority since 2014

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## Benchmarks administered by RBSL under EU BMR

- WM/Reuters FX benchmarks: 4pm Closing Spot FX rate benchmarks for 155 currencies
  - Data sourced from three platform
- CDOR: contribution-based Canadian term interest rate benchmarks representing the C\$100 billion Bankers’ Acceptance market
- CORRA: broker contribution-based overnight Canadian interest rate benchmark representing the GC repo market
- SAIBOR: contribution-based Saudi Arabian term interest rate benchmarks representing the interbank deposit market

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## Benchmarks and indices administered under the IOSCO principles include

- Vietnam Dong FX and Reference Rate Benchmark: post-trade based FX forward and implied interest rate benchmarks
- US Constant Maturity Mortgage (CMM) Index: price assessment-based constant 30 day MBS TBA rates
- TRYFIX: broker-based implied Turkish interest rate benchmarks (FX forward based)
- Tokyo Swap Reference Rates: contribution-based JPY LIBOR and JPY TIBOR interest rate swap benchmarks
- Others

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## Calculation agent for third-party administered benchmarks including

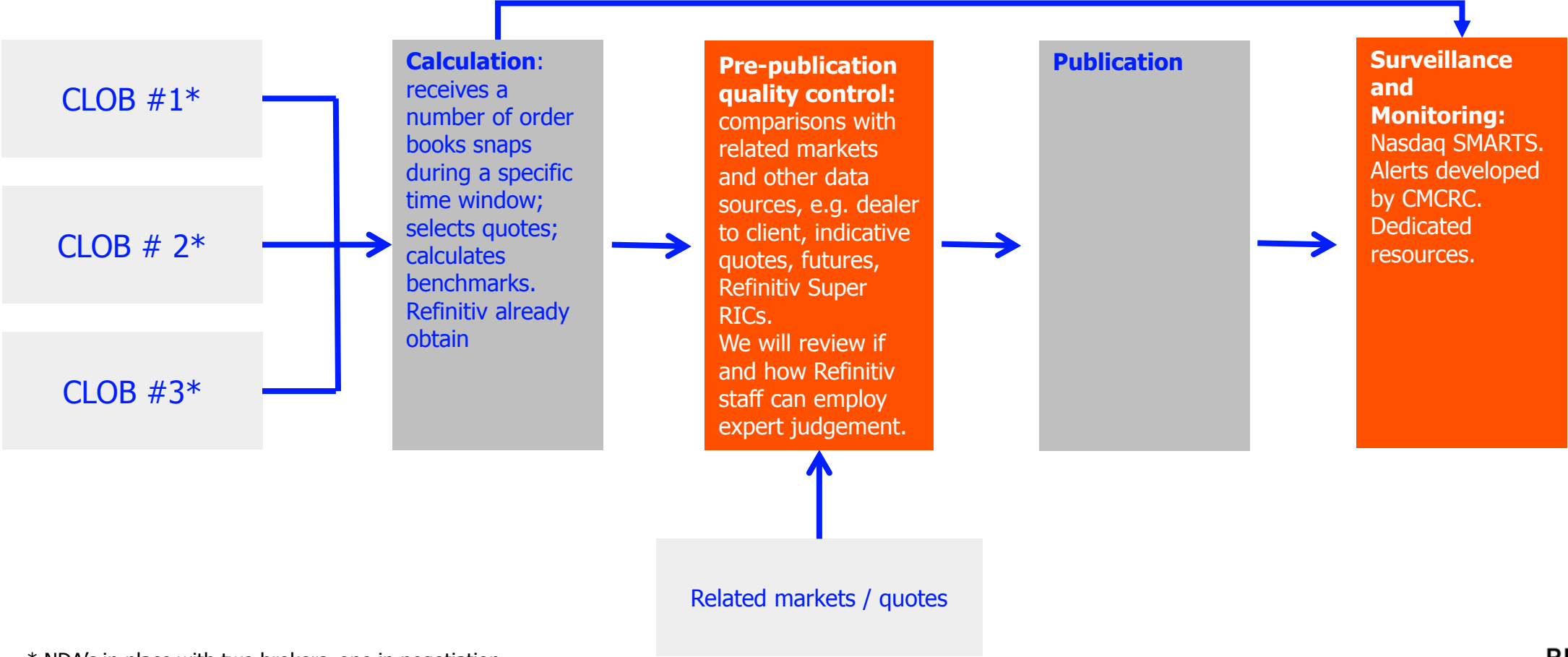
- BELIBOR
- CNH HIBOR
- HONIA
- SIBOR
- SOR
- Others

# An OIS-based term structure that can evolve with the market is the best solution

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- As a **first step**, development of term reference rates using *indicative* OIS prices are an important step in the progress towards OIS CLOBs and the availability of executable quotes for term reference rates
  - Certain existing users of EURIBOR obtain the benefits of a term structure
  - The migration to risk-free rates can be facilitated
- As a **second step** in 2020, CLOB quotes in term reference rates could be added via a new tier in a waterfall of input data
- Indicative OIS quotes can be available from two sources
  - Dealer to client trading platforms
  - Interdealer brokers
- Robustness suggests combining data from as many sources as possible
  - Key design challenge in handling data from dealer to client platforms and interdealer brokers in an equivalent manner
  - Random sampling of mingled data over a window followed by filtering and averaging or a median quote
  - Possibility to add other data to inform quality control and in-house expert judgement
- We recommend adding traded OIS in a **third step** only after markets have become sufficiently liquid

# Illustrative benchmark calculation process



\* NDA's in place with two brokers, one in negotiation

# Refinitiv has developed a strong governance structure and culture

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## Governance

RBSL Board  
Dedicated Risk Manager  
Risk Committee  
Audit Committee  
Oversight Committees

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## Benchmark Management

Benchmark design  
Methodology drafting  
Annual reviews

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## Compliance

Dedicated compliance officer  
Advice and guidance  
Regulatory relationships  
Control

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## Risk Management & Control Framework

Dedicated regulatory oversight staff  
Second line of defence  
Risk management framework  
Real-time and periodic control of adherence to EU BMR  
Conduct risk

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## Quality Control

Pre-calculation  
Pre-publication  
Post-publication

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## Surveillance and Monitoring

Uses Nasdaq SMARTS  
Covers 26 benchmarks  
Between 6 and 13 scenarios, and up to 21 alerts

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## Calculation

Data collection via Refinitiv products  
Calculation systems and operations

- Submission-based benchmarks
- Post-trade benchmarks
- VWAP and equal weighted

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## Distribution & Value-add

Eikon  
Elektron  
FTP  
Third party vendors  
Calculators  
Views & Analytics

# Process to develop a risk free rate terms structure

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- Develop prototype based on indicative data / broker curves
- Obtain feedback on multiple methodology options shared in a consultation paper
- Publish final methodology and publish indicative reference rate
- Client outreach on commercial terms
- Publish risk free rate term structure benchmark / fall-back

Thank you



# Appendix

# Refinitiv rates and indices will facilitate transition to risk free rates

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- OIS-based term rates and swap rates
- Compound RFR indices
- Realised Rate (1W, 1M, 3M, 6M, 12M)
  - Central bank / official methodology
  - Multiple other options / versions
- In advance (extrapolated) realised rates (1W, 1M, 3M, 6M, 12M); (current and 30 day average)
  - Central bank / official methodology
  - Multiple other options / versions
- Calculated or contributed Fixed Leg Swap Rates
  - RFR to fixed
  - Term Rate to fixed
- Acquire / on-board all of the above if administered by a third party
- Switch over Implied Interest Rates (THBFX, VNDFX, TRYFIX, etc) from LIBOR to Term Rates

# Planned Refinitiv services to facilitate transition to RFR

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- IR reform landing page on EIKON (done)
- Accurately reflect coupons for FRNs backwards
- Refinitiv bond calculators to support new RFR and RFR term rates in bonds
- Refinitiv analytics, e.g., spreads calculations, zero curves, forward curves
- Acquire / on-board new content sets such as cleared swaps, futures, options created by exchanges on new RFR
- Expose new curves in all existing Eikon calcs for discounting & calculating forward cashflows
- Curve Builder App :
  - deliver a tool to let our customers build new reference rate curves based on our data, based on SOFRA, SONIA, OIS or ESTER. We have the Curve Analytics but not a tool in Eikon. Planed in 2020 with the new Curve Builder App.
  - offer a tool to view & compare existing LIBOR / Euribor curves vs the new SOFR / Ester curves: view basis between curves or review any scenario effect, across multiple curves at once (shift constituents, shift zero rates...). Mainly requested by Quants, Rates Sales and Corporates.
- Scenario analysis report to calculate the impact of switching from LIBOR curves to new curves for FRN, OTC rates derivatives LIBOR holders; Impacts to LIBOR bonds e.g. called, convert to straight, change floater program
- Evaluated pricing service to adjust methodologies

# Disclaimer

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