

IBOR Reform

RFR Transition at Eurex Clearing

June 2020



Agenda

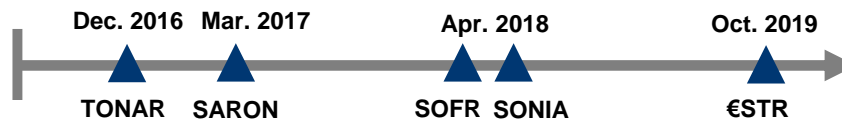
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Global Reform Process (1/2)

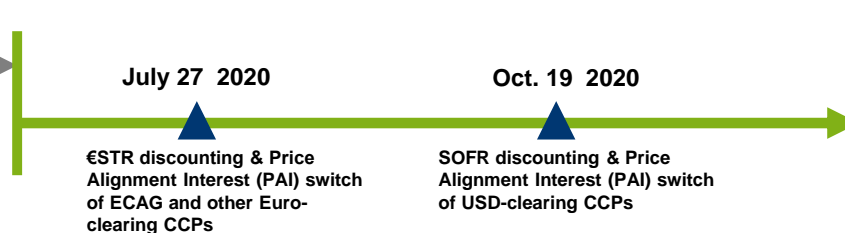
Global IBOR Reform is progressing at various speeds



First Publications



Future Planning



Global Reform Process (2/2)

- Assertions from the Financial Stability Board, the IOSCO Principles for Financial Benchmarks, statements from the Financial Conduct Authority, and eroding confidence in the robustness of IBOR benchmarks due to manipulation have triggered global efforts to review the landscape of commonly used interest rate benchmarks across all jurisdictions
- The chart below shows a breakdown of the **alternative Risk-Free Rates** (RFRs) chosen by the Eurozone and other major global jurisdictions

Region	Alternative Risk-Free Rate	First Published	Administrator	Type of rate	Calculation Method
USD	Secured Overnight Financing Rate (SOFR)	03 April 2018	Federal Reserve Bank of New York	Secured Overnight	Volume-weighted median of Tri-party repo, FICC GCF repo and FICC bilateral treasury rep
GBP	Reformed Sterling Overnight Index Average (SONIA)	23 April 2018 (Reformed)	Bank of England	Unsecured Overnight	Weighted average rate of unsecured overnight sterling transactions brokered by Wholesale Markets Brokers' Association members. Reform includes bilateral and brokered transactions gathered using the Sterling Money Market data
CHF	Swiss Average Overnight Rate (SARON)	August 2009	SIX Swiss Exchange	Secured Overnight	Based on transactions and trade quotes concluded against assets which are eligible for SNB GC and posted on the SIX Repo trading platform, provided they lie within the parameters of the quote filter
JPY	Tokyo Overnight Average (TONA)	July 1985	Bank of Japan	Unsecured Overnight	TONA is a fully transaction-based benchmark for the uncollateralized overnight call rate market, calculated as a volume-weighted average by the BOJ, using information provided by money market brokers (<i>Tanshi</i>)
EUR	Euro Short Term Rate (€STR)	02 October 2019	European Central Bank	Unsecured Overnight	Volume-weighted trimmed mean of borrowing transactions in euro reported to the ECB in accordance with money market statistical reporting (MMSR) requirements

Reform Process Outside the Eurozone

- **SOFR**
 - USD SOFR Reforms
 - Development of SOFR-tied products
 - SOFR bond issuance

- **SONIA**
 - GBP SONIA Reforms
 - Development of SONIA-tied products
 - SONIA bond issuance

- **SARON**
 - CHF SARON Reforms

USD SOFR Reforms

Background

- In 2017, the Alternative Reference Rate Committee (ARRC) identified a viable alternative to USD Libor, by selecting the Secured Overnight Funding Rate (SOFR)
- The Federal Reserve Bank of New York began publishing SOFR at 8.00 am on April 3rd, 2018
- Although there is no enforced stop of USD Libor, panel banks will no longer be obliged to submit to the rate after 2021, likely resulting in it's eventual demise

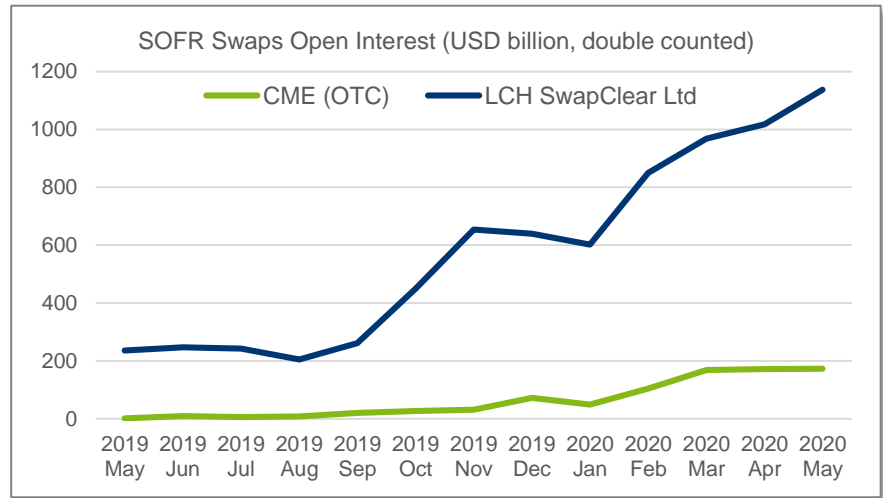
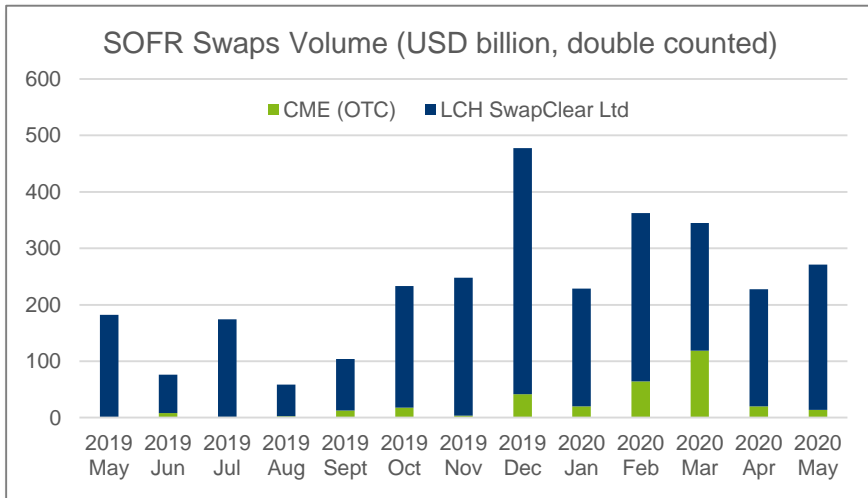
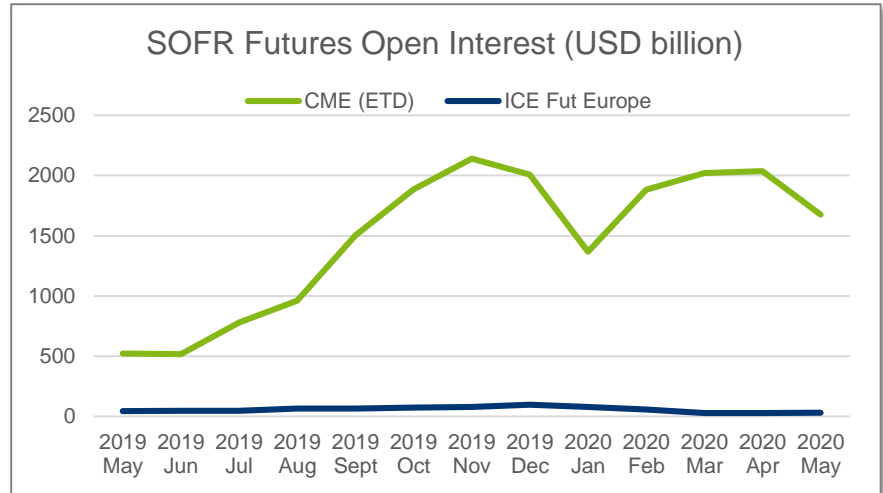
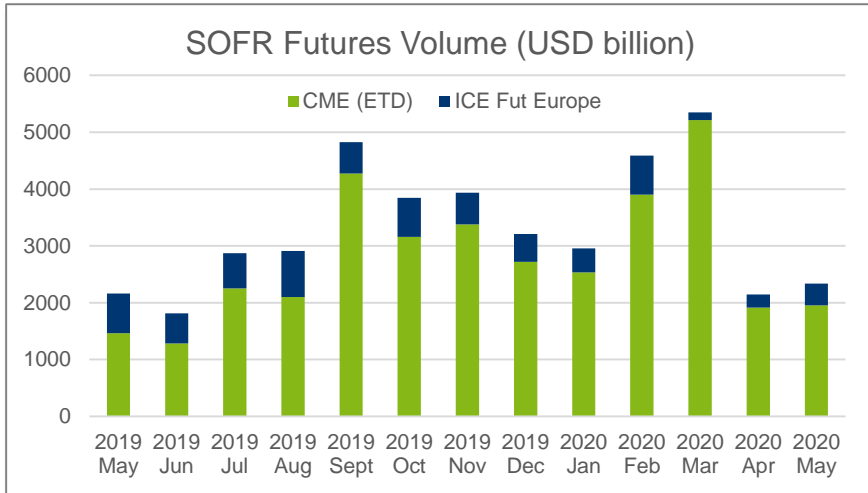
Market Progress

- LCH launched OTC SOFR Swaps on July 17th, 2018, with CME following on October 1st, 2018
- CME and LCH are targeting a discounting switch to SOFR around the weekend of October 16 - 19, 2020
- Both CCPs, upon consultation with members, have named preference for Cash and Physical Swap compensation
 - This will be aligned with auctions for the Physical Swaps

Eurex next steps

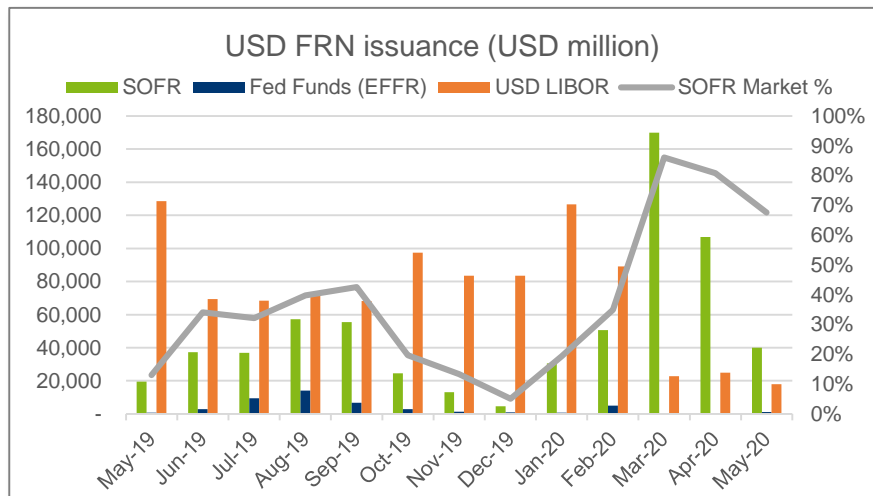
- ECAG SOFR product launch scheduled for July 27th, 2020 with release of EurexOTC Clear 10.1 (see *"Introduction of SOFR Swaps and €STR Discounting/PAI"* slide for details)
- ECAG recently announced that their planned discounting/PAI switch from Fed Funds (EFFR) to SOFR for USD products will take place **over the weekend of October 16 - 19, 2020 to match both CME and LCH**
 - More information is available later in this presentation and in the Member Section of the ECAG website

Development of SOFR-tied products



SOFR Bond Issuance

SOFR (Top 15 Issuers)				
Issuer Name	Total Issuance	Amount Outstanding	New Issuance (May 2020)	Rank (Prev. Rank)
Federal Home Loan Banks	\$ 269,746,500,000.00	\$ 175,146,500,000.00	\$ 7,680,000,000.00	1 (1)
Federal National Mortgage Association	\$ 124,011,755,000.00	\$ 109,011,755,000.00	\$ 14,875,000,000.00	2 (3)
Federal Home Loan Mortgage Corp	\$ 121,396,900,000.00	\$ 79,694,900,000.00	\$ 2,718,000,000.00	3 (2)
JPMorgan Chase	\$ 35,300,000,000.00	\$ 34,250,000,000.00	\$ 6,500,000,000.00	4 (5)
Credit Suisse AG/New York NY	\$ 31,030,500,000.00	\$ 19,471,500,000.00	\$ -	5 (4)
Federal Farm Credit Banks Funding Corp	\$ 27,107,000,000.00	\$ 26,607,000,000.00	\$ 3,150,000,000.00	6 (6)
Citibank NA / Citigroup Inc	\$ 20,800,000,000.00	\$ 19,800,000,000.00	\$ 1,500,000,000.00	7 (7)
Morgan Stanley	\$ 16,756,000,000.00	\$ 16,756,000,000.00	\$ -	8 (8)
European Investment Bank	\$ 8,000,000,000.00	\$ 8,000,000,000.00	\$ -	9 (9)
Metropolitan Life Global Funding I	\$ 7,955,000,000.00	\$ 7,030,000,000.00	\$ -	10 (10)
Wells Fargo Bank NA	\$ 7,625,000,000.00	\$ 6,500,000,000.00	\$ -	11 (11)
Bank of Montreal/Chicago IL	\$ 6,944,500,000.00	\$ 5,124,500,000.00	\$ -	12 (12)
BNP Paribas	\$ 5,185,000,000.00	\$ 5,185,000,000.00	\$ -	13 (13)
Goldman Sachs Bank USA/New York NY	\$ 5,138,470,000.00	\$ 3,988,470,000.00	\$ 40,000,000.00	14 (14)
State Street	\$ 4,500,000,000.00	\$ 4,200,000,000.00	\$ -	15 (15)
TOTAL (Top 15 Issuers)	\$ 691,496,625,000.00	\$ 520,765,625,000.00	\$ 36,463,000,000.00	
TOTAL (From all 90 Issuers)	\$ 739,900,825,000.00	\$ 564,745,825,000.00	\$ 38,905,000,000.00	90



SOFR FRN Issuance heavily outpaces its GBP counterpart

- Federal Home Loan Banks is the largest issuer of SOFR FRNs, with USD 270 billion through May 2020
 - This alone is more than triple the total GBP FRN issuance*
- 79 institutions have issued a total USD 740 billion of SOFR-tied debt, with the top 15 institutions issuing USD 691 billion (93%) of the total
- May 2020 issuance was USD 39 billion, a marked drop from the March 2020 high of USD 160 billion
- SOFR FRN market share for 2020 (vs. FedFunds and USD LIBOR) is just below 60%

The Fed recently went back on plans to use a \$600 billion COVID-19 aid program for small and midsize businesses to promote the use of SOFR, instead tying the emergency loans to USD LIBOR

- The loans all have a term of four years, and therefore must include fallback language to SOFR

GBP SONIA Reforms

Background

- In April 2017, The Working Group for Sterling Risk-Free Rates identified the Sterling Overnight Index Average (SONIA) as their preferred alternative to GBP Libor
- In April 2018, the Bank of England became the administrator of SONIA and began publishing the rate using a **reformed** methodology
- As with USD Libor, panel banks will no longer be obliged to submit to the GBP Libor rate after 2021, likely resulting in it's eventual demise

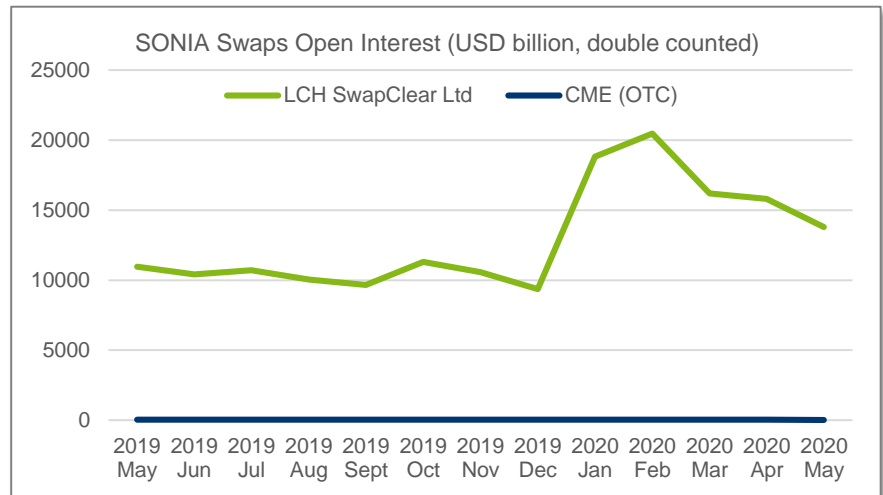
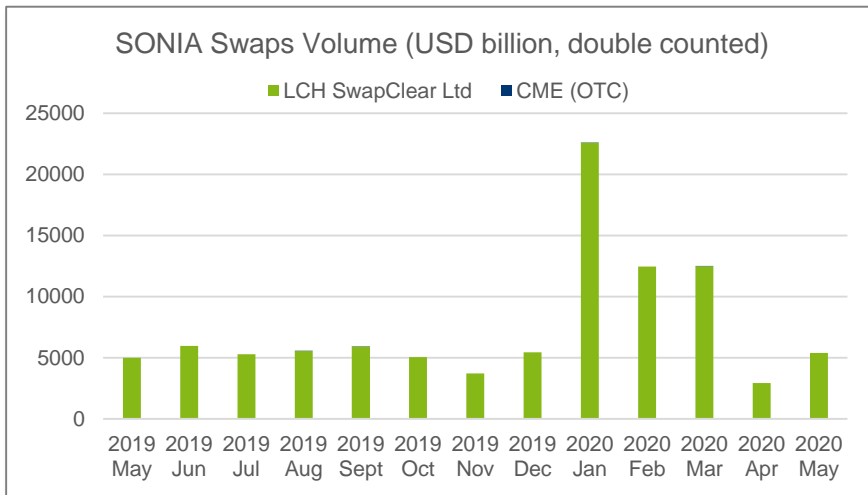
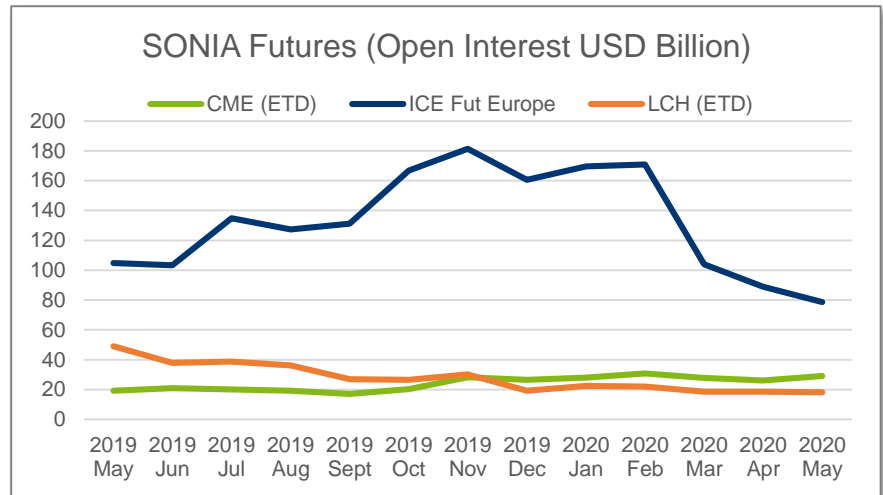
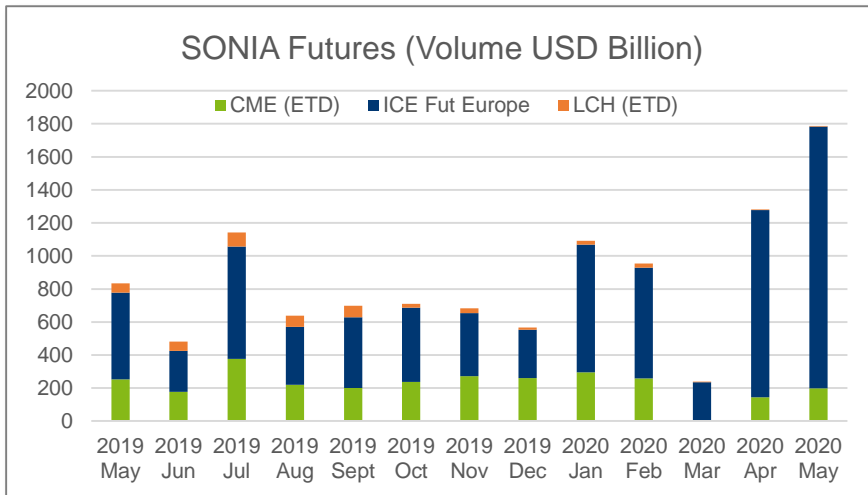
Market Progress

- SONIA is already anchored in active, liquid underlying markets; since April 2018, the average value of transactions underpinning SONIA is **GBP 50 billion** per day
- Working Group consultations on term SONIA reference rates are ongoing; while a compounded in-arrears SONIA is currently used, a forward-looking Term SONIA is expected in Q1 2021, the updated target cut-off date set by the FCA for new LIBOR-linked issuance

Eurex next steps

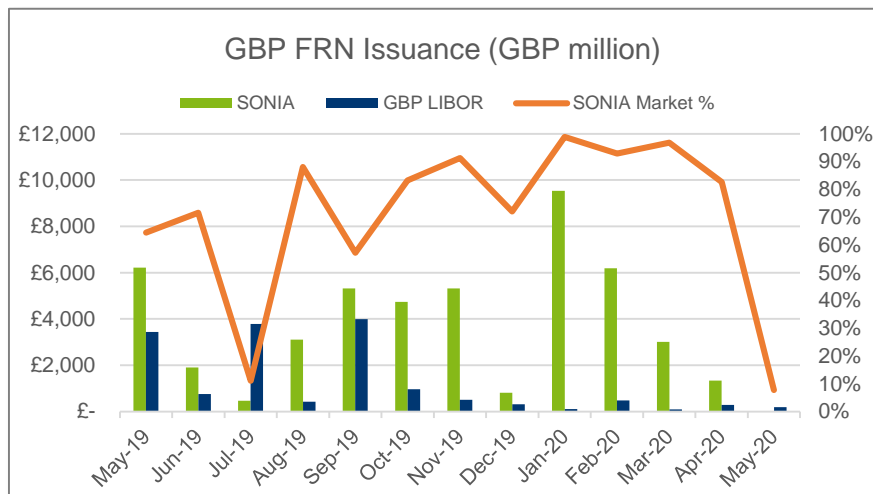
- The transition from the “old” SONIA to the reformed SONIA **has already been completed**
 - Reformed SONIA was introduced as the underlying swap rate, as well as for valuation and PAI, on April 23rd, 2018
 - Transition was seamless (mainly an administrative change) and much smoother than switching to a new rate

Development of SONIA-tied products



SONIA Bond Issuance

SONIA (Top 15 Issuers)				
Issuer Name	Total Issuance	Amount Outstanding	New Issuance (May)	Rank (Prev. Rank)
Santander UK PLC	£ 6,492,270,000.00	£ 6,492,270,000.00	\$ -	1 (1)
Royal Bank of Canada	£ 6,473,249,646.00	£ 4,580,427,646.00	\$ 1,235,650.00	2 (2)
Lloyds Bank PLC	£ 6,297,432,000.00	£ 6,297,432,000.00	\$ -	3 (3)
European Investment Bank	£ 6,186,165,040.00	£ 6,183,385,000.00	\$ -	4 (4)
Commonwealth Bank of Australia	£ 5,437,355,850.00	£ 4,943,301,250.00	\$ -	5 (5)
Nationwide Building Society	£ 5,228,377,440.00	£ 5,228,377,440.00	\$ -	6 (6)
International Bank for Reconstruction & Development	£ 3,868,195,000.00	£ 3,868,195,000.00	\$ -	7 (7)
Toronto-Dominion Bank	£ 3,587,284,000.00	£ 3,587,284,000.00	\$ -	8 (8)
European Bank for Reconstruction & Development	£ 3,416,774,250.00	£ 3,416,774,250.00	\$ -	9 (9)
Export Development Canada	£ 3,226,997,250.00	£ 3,226,997,250.00	\$ -	(10)
Asian Development Bank	£ 3,033,727,000.00	£ 3,033,727,000.00	\$ -	11 (11)
Westpac Banking Group	£ 2,888,925,000.00	£ 2,888,925,000.00	\$ -	12 (12)
Coventry Building Society	£ 2,614,606,500.00	£ 2,481,916,500.00	\$ -	13 (13)
Canadian Imperial Bank of Commerce	£ 2,571,402,000.00	£ 2,571,402,000.00	\$ -	14 (14)
Barclays Bank UK PLC	£ 2,554,231,637.51	£ 2,554,231,637.51	£ 12,291,600.00	15 (15)
TOTAL	£ 63,876,992,613.51	£ 61,354,645,973.51	£ 13,527,250.00	
TOTAL (From all 39 Issuers)	£ 80,630,745,253.51	£ 76,783,101,113.51	£ 15,994,330.00	39



Because SONIA was reformed instead of replaced, the shift from GBP Libor-linked bonds to SONIA-linked bonds has been much more fluid, as liquidity did not start from zero

- Santander is the largest issuer of SONIA FRNs, with GBP 6.5 billion through May 2020
- 39 institutions have issued a total GBP 81 billion of SONIA-tied debt, with the top 15 institutions issuing GBP 64 billion (79%) of the total
- **May 2020 issuance was only GBP 16 million**

SONIA market share was at or around 100% for the first quarter of 2020, before falling to 80% for April and plunging to 8% in May

CHF SARON Reforms

Background

- In January 2016, the Swiss National Working Group (NWG) recommended the Swiss Average Rate Overnight (SARON) as their preferred alternative to Tomorrow/Next Overnight Index Swaps (TOIS) fixings
 - In October 2017, the NWG went on to recommend SARON as the preferred alternative to CHF Libor
- As with USD Libor, panel banks will no longer be obliged to submit to the CHF Libor rate after 2021, likely resulting in its eventual demise

Market Progress

- The NWG recently recommended using compounded SARON as a term rate alternative to Swiss franc LIBOR; the NWG considers it unlikely that a robust term rate based on SARON derivatives will be feasible
- SIX anticipates compounded term SARON will be available for publication some time in 2020; index providers are invited to implement a user friendly and free-to-use calculator for compounded SARON

Eurex next steps

- The transition to SARON **has already been completed**
 - SARON was introduced for clearing as the underlying swap rate, as well as for valuation and PAI, on October 9th, 2017
 - First SARON trade cleared on that day
 - All legacy TOIS trades netted/terminated mid December 2017; **no remaining exposures**

Eurozone Reform Process

- Euro Risk-Free Rate Working Group
- Key rates for the Eurozone
- Development of €STR-tied products

Euro Risk-Free Rate Working Group

Progress is ongoing with the developments of EUR RFRs

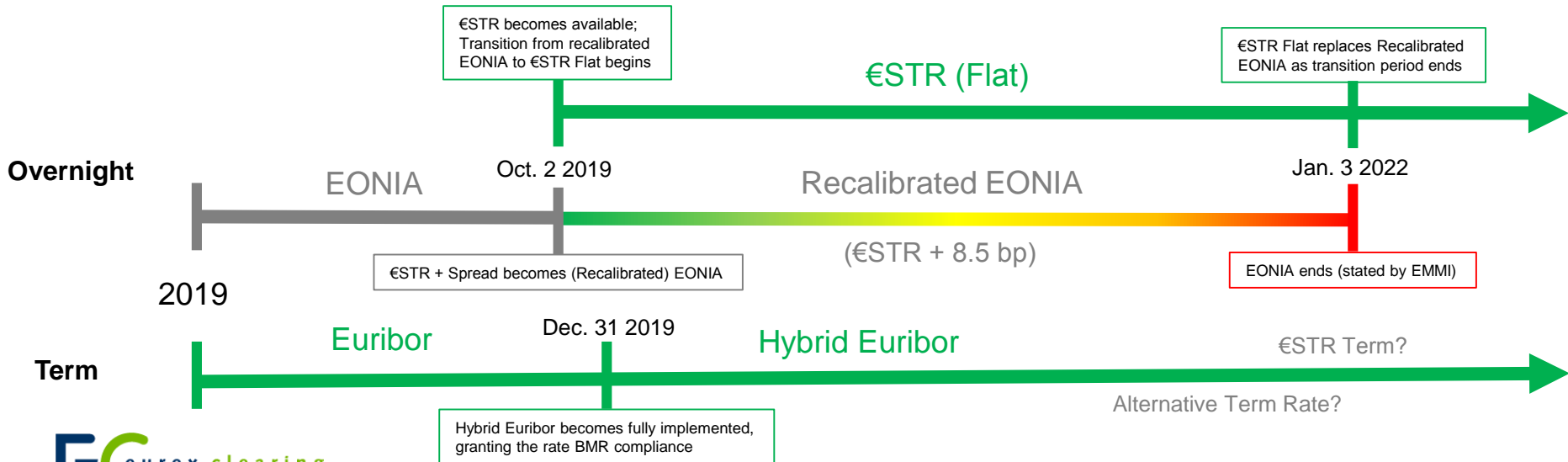
The Euro Risk-Free Rate Working Group

- Founded in February 2018
 - Made up of 21 panel banks and additional subgroups
 - Tasked with:
 - Identifying term structure on alternative Risk-Free Rates (RFRs) in euro area
 - Recommending the transition path to new RFRs
 - Ensuring the contractual robustness of legacy and new contracts
-
- On September 13, 2018, **Euro Short Term Rate (€STR)** was recommended as the replacement to EONIA
 - €STR reflects the wholesale euro unsecured overnight borrowing costs of euro area banks
 - €STR is calculated based entirely on actual individual transactions in euro that are reported by banks in accordance with the ECB's money market statistical reporting (MMSR)
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- **€STR** was also recommended to serve as the basis for developing fall-backs for contracts referencing **Euribor**

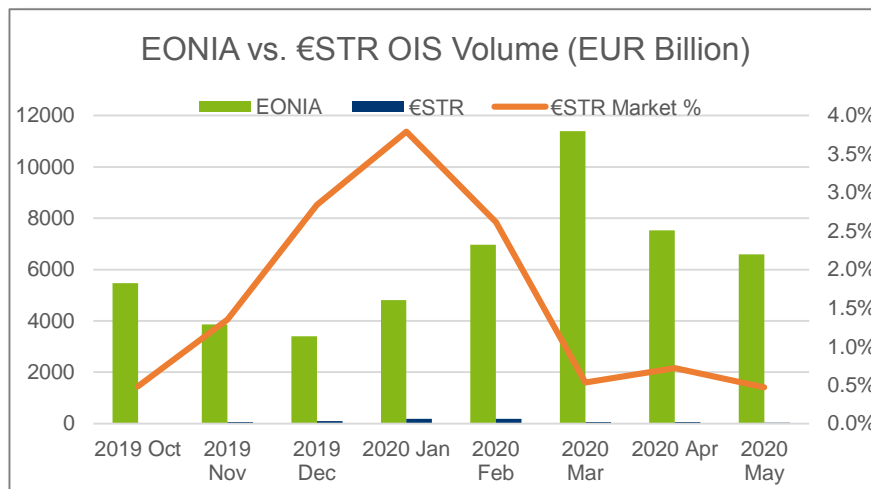
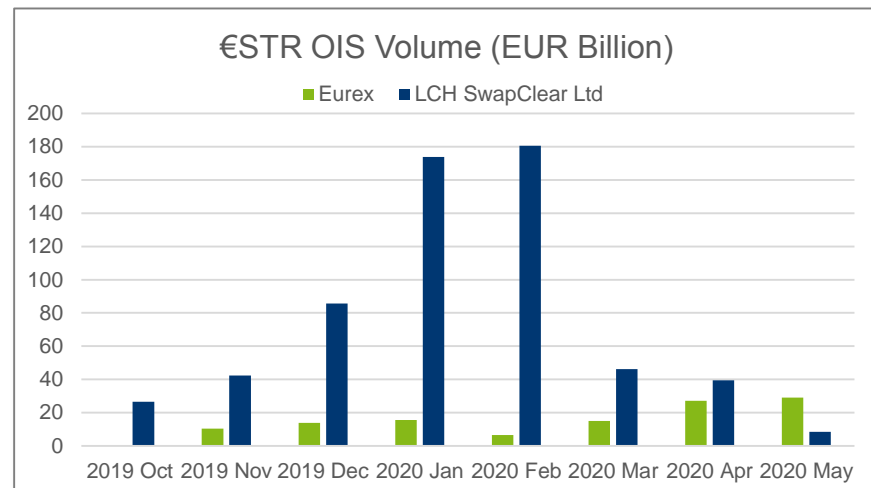
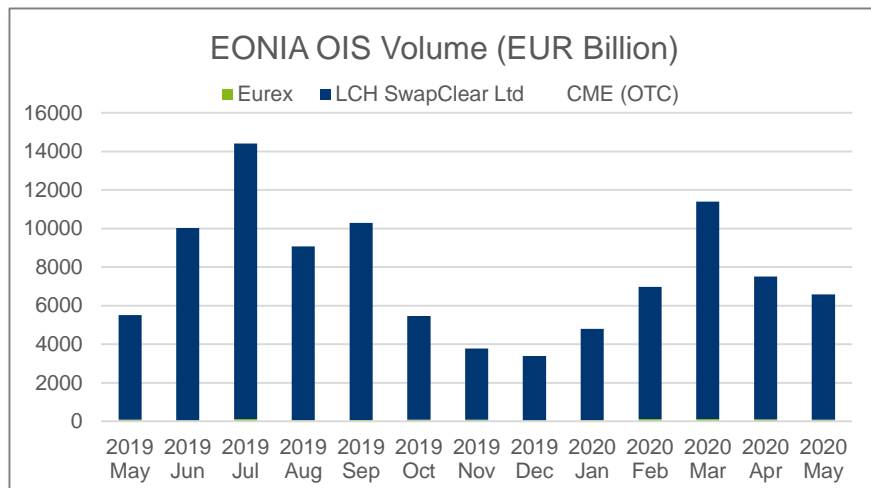
The working groups are currently working on a **methodology to build a term rate from the overnight €STR**; however, with the new **hybridized-Euribor now BMR compliant**, this is no longer a pressing issue

Key rates for the Eurozone

	Rate	Past	Present	Future
Overnight	Old EONIA	Would have been found non-compliant to BMR; efforts to Reform the rate were unsuccessful	The “recalibrated” EONIA has now officially replaced the “old” EONIA as of October 2, 2019	N/A
	Recalibrated EONIA (€STR + 8.5 bp)	Proposed €STR + a fixed spread of 8.5 basis points to replace EONIA’s current methodology, in order to ease transition from EONIA to €STR (flat)	The recalibrated EONIA debuted on October 2, 2019, the same date which €STR began publication	Is in effect from Oct. 2, 2019 – Jan 3, 2022
	€STR (Flat)	Recommended to replace EONIA by the Euro Risk-Free Rate Working Group	Released by the ECB on October 2, 2019	Will fully replace the Recalibrated EONIA (€STR + Spread) by Jan. 3, 2022
Term	Euribor	Would have been found non-compliant to BMR under its current methodology	Hybrid methodology confirmed to be compliant to BMR by EMMI in July 2019, and fully integrated at end 2019	As Euribor is now BMR-compliant, Euribor can continue past the new BMR deadline of January 3, 2022
	€STR Term	N/A	In discussion to be built from a collection of €STR OIS quotes	Work on €STR term will increase after the transition to the recalibrated EONIA is complete



Development of €STR-tied products



€STR Key Facts

- For the euro-denominated OIS market, EONIA OIS still heavily outweighs that of €STR
 - €STR OIS market share grew to a peak of 3.8% (vs EONIA OIS) in January 2020, **before falling to 0.5% in May**
- €STR futures are in development and will be launched subject to market demand
- Seven €STR FRNs have been issued since the launch of the rate in October, with only one coming in the past three months
 - Total issuance amounts to **€4.4 billion**

IBOR Reform Process at Eurex

- **Completed transition**
 - EONIA recalibration
 - Introduction of €STR clearing
- **Upcoming transition**
 - €STR discounting/PAI switch date delay
 - Introduction of SOFR swaps and €STR discounting/PAI
 - EONIA - €STR discounting/PAI transition details (1/2)
 - EONIA - €STR discounting/PAI transition details (2/2)

EONIA recalibration

Review of completed EONIA recalibration and publication time switch (Oct. 2, 2019)

Completed transition

	Bond/Repo	ETD	Swap
PAI Collateral remuneration	☒	☒	☑
Discounting	N/A	☑	☑
Trade confirmation (referencing)	☑	☑	☑

Swaps

- All EUR OTC rates derivatives *currently* remain under EONIA discounting/PAI regime
- The last available fixing rate used for PAI calculations
- Settlement processes unchanged

Futures

- Contract Specification updated to reflect:
 - EONIA rate now defined as €STR + spread
 - The final settlement day pushed forward by one business day from T to T+1

Repo

- The available EONIA rate of the current business day used for settlement calculation of the end-leg
- Once the final EONIA rate is available on T+1, the cash differences processed as “delta payments” on the settlement day in order to consider the current EONIA rate in the settlement of the end-leg

Impacts of EONIA recalibration

	Bond/Repo	ETD	Swap
PAI Collateral remuneration	☒	☒	☑
Discounting	N/A	☑	☑
Trade confirmation (referencing)	☑	☑	☑

Introduction of €STR clearing at ECAG

EurexOTC Clear Release 10.0 on 18th November 2019

Completed transition

Eurex began offering OTC €STR clearing on **18th November 2019**

- **Euro OIS** (fix for float) references the €STR benchmark (up to 50 years)
 - Eligibility of Euro OIS with a spread on the floating leg of the trade (the spread is treated as simple interest above the self-compounding floating rate)
- **€STR-Euribor basis swaps** and **EONIA-Euribor basis swaps** (float/float) (up to 50 years)
- All cleared OTC derivatives referencing the €STR benchmark reside under a common EONIA-based discounting and PAI regime like all other Euro OTC derivatives
 - The EONIA - €STR discounting switch will take place with the release of EurexOTC Clear 10.1 on July 27th, 2020

For full details, please see Eurex circular 071/19

€STR discounting/PAI switch date delay

Postponement of EurexOTC Clear Release 10.1

Upcoming transition

- The COVID-19 crisis significantly impacted the market over the past months, including the necessary preparations of our Clearing Members, Basic Clearing Members and FCM Clearing Members for changes planned to be rolled out by Eurex Clearing as part of the EurexOTC Clear Release 10.1 on 22 June 2020
- After careful considerations and in dialog with the market, Eurex Clearing would like to grant relief to our customers and allow them to perform all necessary preparations prior to the upcoming release. As a result, Eurex Clearing decided to **postpone the EurexOTC Clear Release 10.1, and therefore the EONIA to €STR discounting switch, by five weeks to 27 July 2020**
- Accordingly, the simulation start date for the aforementioned Release is also postponed by five weeks to the last week of May 2020
- The updated timeline for the release is as follows:

Start of simulation:	28 May 2020
Start of production:	27 July 2020

Introduction of SOFR swaps and €STR discounting/PAI

EurexOTC Clear Release 10.1 on 27th July 2020

Upcoming transition

Eurex will begin offering OTC SOFR clearing on **27th July 2020**

- **USD OIS** (fix for float) references the SOFR benchmark (up to 50 years)
 - Eligibility of USD OIS with a spread on the floating leg of the trade (the spread is treated as simple interest above the self-compounding floating rate)
- **SOFR – USD Libor** and **SOFR - EFFR basis swaps** (float/float) (up to 50 years)
- All cleared OTC derivatives referencing the SOFR benchmark will reside under a common Effective Federal Funds Rate (EFFR)-based discounting and PAI regime like all other USD OTC derivatives
 - ECAG targeting discounting/PAI switch to SOFR for USD products on or around October 16, 2020 to match CME and LCH; more information will be available by end Q2 2020

Switch to €STR-based discounting and PAI regime **will be conducted between July 24 – July 27**, also in alignment with LCH and CME

★ Impact assessment available via daily reporting trade level NPVs, VMs and DV01s under both **EONIA (CC203, CC233 report)** and **€STR (CC303, CC333 report)** discounting, available via the **Common Report Engine**

★ Updated information for **simulation preparation** and test of switch from EONIA to €STR can be found at the Eurex Clearing site below:

<https://www.eurexclearing.com/clearing-en/resources/circulars/clearing-circular-1972438>

- We encourage members to participate In the preparation dry run

EONIA - €STR discounting/PAI transition details (1/2)

Preparations for discontinuation of EONIA on 3 Jan. 2022

Recommendation from ECB RFR Working Group SG5	Eurex Clearing Approach
<p><i>Discounting</i></p> <ul style="list-style-type: none"> • Clean discounting for cleared derivatives and non-cleared derivatives, if feasible; • Progressive phasing-out of legacy books discounted using EONIA to €STR asap; • €STR flat is recommended to be used for discounting 	<p><i>Discounting</i></p> <ul style="list-style-type: none"> • Transition the PAI and the discounting based on EONIA to €STR-flat (no spread) in a single step (clean discounting) for all EUR OTC derivatives including but not limited to forward-rate agreements (FRA), interest-rate swaps (IRS), overnight-index swaps (OIS), and inflation swaps
<p><i>Compensation</i></p> <ul style="list-style-type: none"> • Discounting and compensation are interlinked; • Exchanging the difference in PVs by cash in terms of operational simplicity; • Individual decision of appropriate compensation approach 	<p><i>Compensation</i></p> <ul style="list-style-type: none"> • Compensate for changes in the present values of EUR OTC derivatives across the PAI discounting switch date by a euro cash credit or debit via one-time cash fee instructions on trade level • This mitigates profit-and-loss impacts (positive or negative) resulting from variation margin payments induced by the discounting switch
<p><i>Date for switching the discounting curve from EONIA to €STR</i></p> <ul style="list-style-type: none"> • CCPs to align the discounting switch dates as much as possible to transition from an EONIA to a €STR discounting regime - a “big bang” approach for cleared markets; • CCPs to set the discounting switch date as early as possible, originally recommended to occur towards the end of the second quarter of 2020* 	<p><i>Date for switching the discounting curve from EONIA to €STR</i></p> <ul style="list-style-type: none"> • OTC €STR switch will be performed between July 24, 2020 and July 27, 2020, which aligns with LCH; <ul style="list-style-type: none"> • I.e. Friday, July 24, 2020 is the last day with EONIA PAI calculations and Monday, July 27, 2020 is the first day with €STR-based PAI calculations • Eurex Clearing supports single discounting switch date across CCPs



EONIA - €STR discounting/PAI transition details (2/2)

Current state		Discounting switch – compensation mechanism		Final state	
Discouting PAI	EONIA flat Curve based on EONIA OIS quotes	The discounting switch requires an effective compensation mechanism to avoid creating artificial losses/gains	NPV changes will be compensated via a cash payment equal to minus the value transfer as a mandatory cash-only fee settlement	€STR flat Curve based on €STR OIS quotes	Discouting PAI
	Based on EONIA discounting				
EURIBOR curve					EURIBOR curve

Cornerstones of the compensation process	ECAG approach
Affected trades	All EUR-denominated OTC trades (IRS and inflation) in the five-day split under the PFI01 liquidation group are currently cleared under EONIA PAI and will be affected by the discounting switch
Value Transfer (VT)	<ul style="list-style-type: none"> Value Transfer will be calculated EOD Friday 24th at trade level as the NPV-difference NPV(€STR disc) – NPV(EONIA disc) In order to define a stable transition process ECAG will consistently utilize the fixed implied spread between the EONIA and €STR curves such that €STR = EONIA – 8.5bp on a zero rate level, i.e. defining €STR as a dependent curve
Mandatory compensation fee	The value transfer will be compensated by a mandatory cash fee at trade level with settlement SOD Tuesday 28 th July 2020. The fee is exactly minus the value transfer
Variation Margin (VM)	The value of the VM EOD Monday will be a combination of market changes and the switch from EONIA to €STR discounting
Total settlement amount	The mandatory compensation fee will neutralise the value transfer in the EOD Monday VM (settling on Tuesday) leaving market changes as the only driver of VM changes
Transparency through reporting	ECAG will provide a reconciliation trail from the calculation of the value transfer to the booking and settlement of the mandatory cash compensation provided by ECAG as calculation agent
Stability of the transition process	ECAG will allow no post-trade events starting EOD Friday 24 th July 2020 and ending EOD Monday 27 th July 2020

Introduction of SOFR discounting/PAI

EurexOTC Clear Release 11.0 on 19th October 2020

Upcoming transition

All EurexOTC Clear derivatives denominated in US dollar currently reside in an FedFunds-based PAI and discounting regime. An important step in the market wide transition process to SOFR as the new US dollar risk-free rate is the transition of the FedFunds (EFFR)-based PAI to a PAI based on SOFR.

Eurex Clearing supports the industry transition efforts and has consulted on various aspects of transitioning the PAI and the discounting to SOFR with its members.

Eurex Clearing plans to implement the following for its Eurex OTC Clear service:

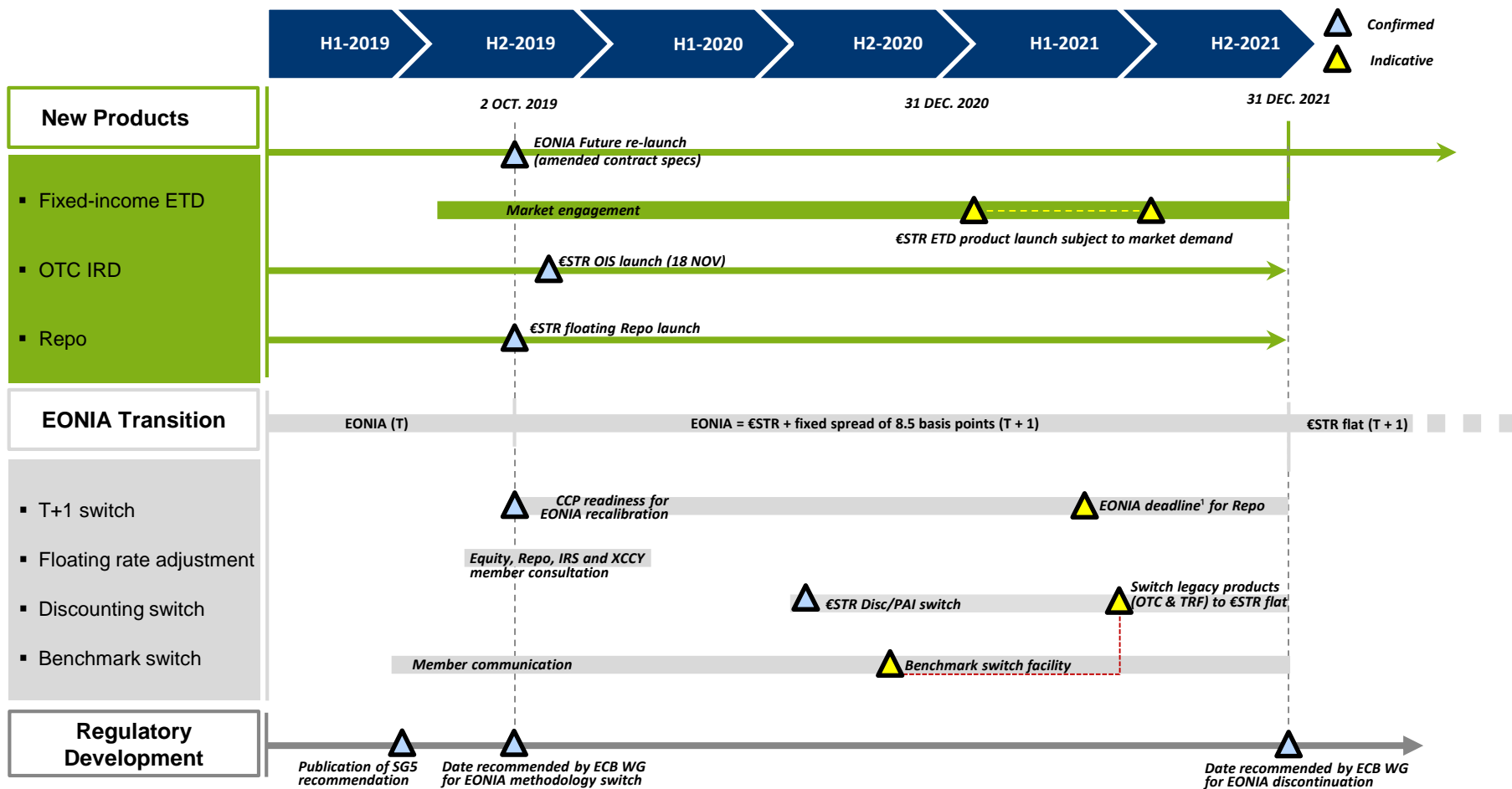
1. Transition the PAI and the discounting based on the FedFunds to SOFR in a single step
2. Compensate via a USD cash-only mechanism any credit or debit deriving from changes in the present values of USD OTC derivatives across the PAI discounting switch date
 - E.g. via one-time cash fee instructions; trade level reporting transparency targeted
 - This mitigates profit-and-loss impact (positive or negative) due to resulting variation margin payments
3. Perform the switch across the weekend of 17/18 October 2020, in coordination with both the CME and LCH
 - **16 October 2020:** last day on which FedFunds-based PAI calculations are applied;
 - **19 October 2020:** first day on which SOFR-based PAI calculations are applied

Details regarding the methodology and technical impacts of the switch are available in the [Member Section](#) of Eurex Clearing under the path:

- **Risk & Collateral Management > Benchmark Transition Information**

Overview of EONIA transition and new product introduction

- Eurex smoothly completed the EONIA recalibration and T+1 Switch on October 2, 2019
- Various cross-market IBOR-tied products will be offered following market consultation and regulatory recommendation



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