What is the transition from EONIA to €STR (€uro Short- Term Rate)

What is the problem with EONIA?

- EONIA in its current form will not become BMR compliant, given the lack of underlying transactions and high concentration of volumes by only a few contributors. Therefore, EONIA usage should be restricted and its administrator EMMI announced that it will stop publishing it on 3 January 2022.
- As a consequence, the working group on euro riskfree rates recommended €STR for its replacement after a public consultation.

What is the EONIA - €STR transition?

- In order to maintain EONIA for a transitional period and until its discontinuation in 2022, its methodology will be changed.
- Since 2 October 2019, the current EONIA methodology has been modified to become €STR plus a fixed spread of 8.5 basis points. This spread is based on a simple average of the EONIA(pre-€STR spread between 17 April, 2018 and 16 April, 2019, with a 15% trimming mechanism).
- The recalibration of the EONIA methodology has taken place on the first day of the daily publication of €STR, on 2 October 2019. The publication of EONIA moved from the current timing every evening at "T" (by 7pm) to "T+1" (9.15 am), to be aligned with €STR publication (T+1 at 8am).
- NB: This methodology was suggested by the working group on euro risk-free rates to EMMI after a public consultation.

What is €STR?

€STR is a rate which reflects the wholesale euro unsecured overnight borrowing costs of euro area banks.

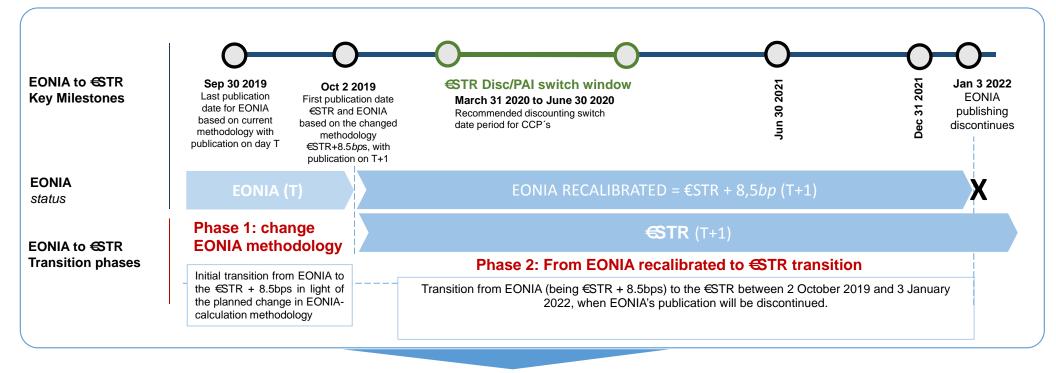
The rate is published (first date of publication: 2 October 2019 at 8:00 am) for each TARGET2 business day based on transactions conducted and settled on the previous day (reporting date T) with a maturity date of T+1.

€STR is exclusively based on borrowing transactions in euro conducted with financial counterparties that banks report to the ECB in accordance with the MMSR Regulation. €STR is calculated using overnight unsecured fixed rate deposit transactions over € 1 million.

The ECB is publishing €STR data at the end of every maintenance period under this link:

https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/euro_short_term_rate/html/index.en.html

The transition from EONIA to €STR



WG euro RFR Recommendations

WG euro RFR is publishing recommendations for market participants to understand the EONIA to €STR transition issues from a legal, products, accounting and risk management perspective

Publication time change

Are you ready for the **EONIA** publication time change?

Market participants should be prepared extensively for adaptation to a new publication time as of 2nd October 2019.

The transition should not be underestimated, EONIA is widely used both as a reference rate and as a collateral remuneration and cash flow discounting rate for financial products across a variety of markets.

EONIA to €STR transition is impacting many functions along the value chain of a financial institution:

- Internal Governance
- Legal (contract robustness)
- Business products
- Accounting & Reporting
- Risk management
- Financial
- IT& Operations
- Communication & Education

Impacts are expected in the fields of financial instruments and contracts, trading and banking book systems, front-end and back-end systems, valuation and pricing models, financial and risk reporting, review of current documentation, processes and procedures...

4

Recommended actions

- Consider WORKING GROUP
 RECOMMENDATIONS AS A
 GUIDANCE for managing the EONIA
 to €STR transition issues (see useful
 links section)
- 2 Screen inventory of AFFECTED
 TRANSACTIONS AND SYSTEM
 ENVIRONMENTS to assess the
 modifications needed to cope with the
 change in EONIA's publication time from
 7pm CET on T (until 30 September 2019)
 to 09:15 am CET on T+1 (from 2 October
 2019).
- Align your involved processes with the 08:00 am CET PUBLICATION TIME for the STR, and 09:15 am CET for EONIA, respectively, and maintain exceptional procedures for STR re-publication events.

Consider and adjust :

- the DEFAULT SETTLEMENT TIME of the cash & derivatives products¹
- the gradual impact in VALUATION MODELS (funds transfer PRICING & DISCOUNTING CASH flow)
- 3. The necessary modifications in order to be able to issue, buy, trade and manage new papers indexed to €STR and avoid issuing new papers indexed to EONIA with maturities going beyond the transition period.

From RISK MANAGEMENT PERSPECTIVE,

Assess the financial and non-financial risks of transition as part of your internal and ongoing risk assessment process.

Consider potential effects on short-term liquidity risk and on settlement risks from changes of the publication schedule and its impact on fixing and payment processes and corresponding systems. Conduct an appropriate quantitative impact assessment on key market risk figures including 1)an impact test on VaR and sensitivity limits and 2) impact test on internal models for regulatory capital charges for market risk.

From **LEGAL PERSPECTIVE**, whenever feasible and appropriate, no longer entering into new contracts referencing EONIA as from 2 October 2019. In existing contracts referencing EONIA and maturing after December 2021, to replace EONIA as a primary rate as soon as possible or embed robust fallback clauses. For **new contracts** that still reference EONIA and mature after December 2021, or fall under the EU Benchmarks Regulation (BMR), robust fallback provisions should be included. **Legacy contracts** with EONIA as the underlying/reference rate that mature before December 2021 will be covered by the ongoing publication of EONIA until the end of 2021.

From **ACCOUNTING PERSPECTIVE**, to consider the implications in the **valuation of financial assets and liabilities.**

The transition from EONIA to €STR may therefore impact cash flows and net present values which could lead to undesired accounting volatility and not provide useful and relevant information on the performance of the institutions. In addition to hedge accounting implications (IFRS 9/IAS 39), potential non-hedge related implications, which should be considered as part of the transition. Implications and possible solutions are being discussed with IASB

¹ WG recommendations include Product specific analysis regarding settlement defaults including derivatives, money market transactions, cleared derivatives, securities, cash products (mainly floating rate repos) unsecured cash products (these include current accounts, corporate and retail, overdrafts and swingline facilities) and investment funds.

*Non exhaustive

How to navigate EONIA to €STR transition

Checklist for EONIA publication time change

Manage EONIA T+1 publication time



Checklist*

Screen inventory of affected transactions & system environments to assess the needed modifications	
Prepare relevant teams during the cutover period to ensure that the transition does not trigger process failures	/
Align the main processes with the 08:00 CET publication time for €STR and 09:15 CET for EONIA and maintain exceptional procedures for €STR re-publication events.	

Process and IT impact assessment of the chain (Front-to-back to accounting chain), would include:

Referential - ensure the EONIA fixing in your referential is the correct one	\
Valuation - ensure the valuation process is not affected by a change of EONIA publication	
Settlement	
Pricing/Modeling / Ops Margining readiness	
Accounting (hedging)	
Collateral management / Review clearing calculation	
Calculation & Reporting systems	
Calculation & Reporting systems Include €STR in Internal Systems	

Define a legal strategy

Determine the most appropriate way of achieving the amendment of legacy contracts, new contracts design and amendments through the transition (i.e check how methodology, publication time or calculation agent, etc are included within your contracts)	
Identify and develop a renegotiation plan for contracts liked to EONIA, in particular maturing after 2021	. 🗹
Define a communication strategy for counterparties of EONIA contracts	. 🗹
Identify and manage ACCOUNTING AND CAPITAL IMPACT	
Risk assessment and management (models, liquidity, Identify risks models affected and define an adjustment and calibration planning	
 Identify and manage basis risk and expected impacts on pricing systems 	
Ensure awareness within your organization	
 Develop internal governance processes that allow properly overseeing changes to policies, systems, processes and controls	
Ensure involved employees are prepared and well educated on the implications of the transition	

Checklist for EONIA publication time change - PRODUCTS

	• Key impacts		
Products	Default settlement time	Moving from T to T+1 publication	
Derivatives	settlement T+1	settlement T+2 (to accommodate international market participants)	
 Cleared Derivatives 	settlement T+1	settlement T+1 (use last available fixing rate for PAI calculation)	
Money market	settlement T+1	settlement T+2 (nominal vs. interest one-day difference)	
 Securities 	coupon payments T-1 (coupon payments calculated using T-1)	T-1, no changes expected (adapt settlement, valuation & accounting procedures)	
Secured cash products (2)	same day settlement (T)	same day settlement (T) (using las available fixing)	
 Unsecured cash products (3) 	settlement T+1	Market participants should find bilateral solutions (adapt settlement, valuation & accounting procedures)	
Investment funds	NAV ⁽¹⁾ uses same day rate (T)	NAV calculation affected (use last available fixing, asses NAV related processes)	
Fund transfer pricing models (FTP)	FTP uses same day rate (T)	on T apply rate published on T+1 (if not, use last available fixing T-1 published on T)	

⁽¹⁾ NAV: net asset value

⁽²⁾ Secured cash products, main types of product affected are floating rate repos and reverse repos

⁽³⁾ Unsecured cash products, main types of product affected are current accounts, savings accounts, overdraft facilities, time deposits, call accounts and swingline, bilateral or intracompany loans

Checklist for EONIA publication time change - MODELS

Models

Key Recommendations

Funds transfer pricing models

- If market participants use EONIA as the base rate in the FTP framework, they should consider replacing EONIA with the €STR. €STR is a bid rate while EONIA is an offered rate, therefore liquidity premium calculations need to be corrected accordingly.
- Market participants using EONIA in their FTP models should create a transition plan, covering all relevant FTP-related systems and policies.

Interest rate curve construction

- It is recommended to use a single curve for valuation purposes per counterparty for all types of contract (i.e. new and legacy contracts).
- During the transition period, market participants may use different applicable interest rate curves:
 - an EONIA curve constructed from (sufficiently liquid) EONIA-based instruments
 - a "shifted EONIA curve" derived from the existing EONIA curve through a parallel shift by -8.5 basis points
 - a €STR curve constructed from (sufficiently liquid) €STR instruments
 - a "shifted €STR curve" derived from the existing €STR curve through a parallel shift of +8.5 basis points

Checklist for EONIA publication time change - MODELS

Models

Key Recommendations

Interest rate term structure models

Discounted cash

derivatives value

adjustment models

flow, derivatives

pricing and

■ Market participants are encouraged to identify how their term structure models (e.g. input data, assumptions) will be affected by the transition from EONIA to the €STR and to monitor market developments to adjust the models in a timely and appropriate fashion.

- No structural and conceptual changes in DCF models expected.
- €STR-linked derivatives prices expected to become progressively available. They will have to be consistent with the no-arbitrage condition.
- Until the €STR swap curve becomes directly observable, the fixed spread relation between EONIA and €STR fixings can be applied to derive a full term structure for the €STR from EONIA-linked overnight index swaps (OISs).
- Market makers, inter-dealer brokers & vendors encouraged to publish stand-alone €STR OIS prices alongside EONIA asap after the recalibration date.
- EURIBOR par swap rates and the EURIBOR par rates would be affected by the transition, and may affect accounting and valuation models.
- Assess both model valuation and compensation scheme impacts on their derivatives under bilateral CSAs.

- Switching the PAI rate from EONIA flat to €STR flat will have an impact on non-linear interest derivatives such as caps/floors and swaptions.
- Review options on derivatives with physical settlement, valuation could be affected (i.e. option traded before the transition date but exercise date falls after the migration of the CCPs/bilateral to €STR remuneration/discounting)
- Valuation adjustment (xVa) models will need to be recalibrated to new market data.
- Monitor derivatives market and its transition from EONIA-linked derivatives to the new €STR-based derivatives (fair value calculation)
- Assess the impact on valuation models of switching from the EONIA OIS discounting curve to €STR OIS discounting (fair value calculation)

Useful links

EONIA to €STR LEGAL action plan Recommendations Working Group on Euro Risk-Free Rates EONIA



A. Recommendations of the working group on euro risk-free rates on the EONIA to €STR legal action plan



B. Press release

EONIA to the **€STR** Transition impact from on cash and derivatives products



A. Recommendations of the the working group on euro risk-free rates on the impact of the transition from EONIA TO THE €STR ON CASH AND DERIVATIVES PRODUCTS



B. Press release