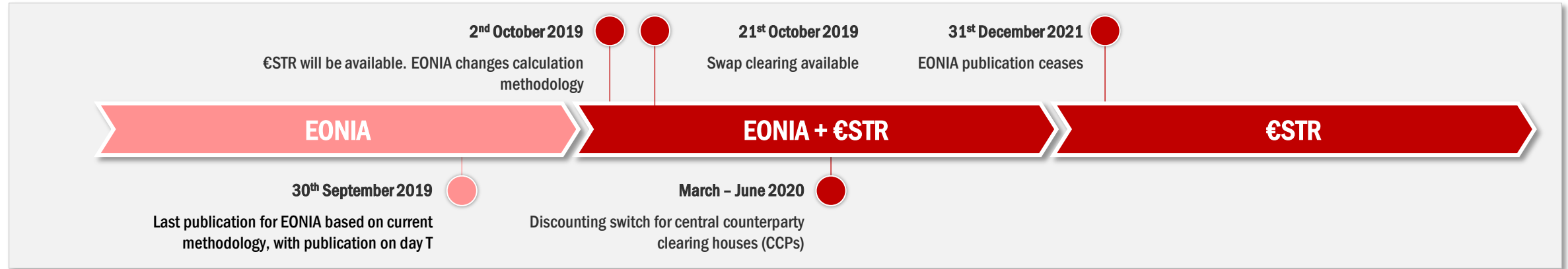


IBOR Reform

EONIA Recalibration Oct 2nd 2019

EONIA Context | By January 2022 EONIA will be replaced by an entirely new short-term (overnight) reference rate

EONIA & €STR Timeline



2 nd October 2019		
Stream	Impact	Main actions
Processes / Systems	■ ■ ■	• Execute system and process changes
Legal	■ ■ ■	• Contract due diligence to assess repapering needs • Develop clauses for new contracts
Models	■ ■ ■	• No impact identified
Accounting	■ ■ ■	• No impact identified
Communication	■ ■ ■	• Develop communication materials to respond to clients enquiries

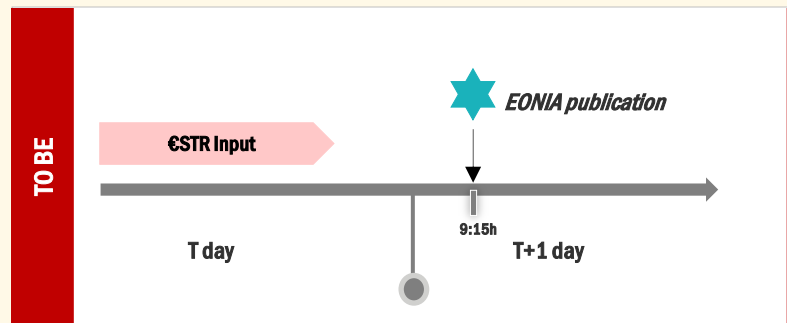
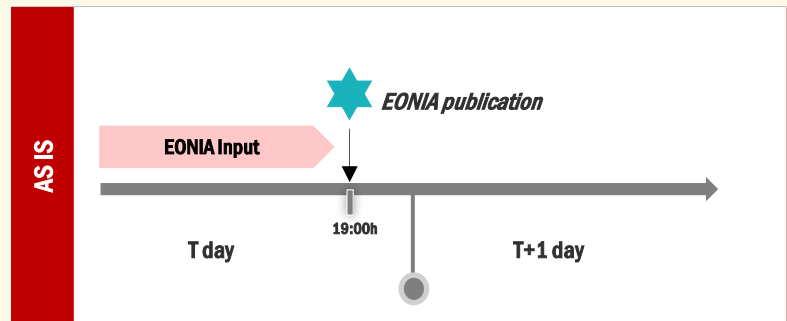
31 st December 2021		
Stream	Impact	Main actions
Processes / Systems	■ ■ ■	• Execute PAI and discounting switch to €STR
Legal	■ ■ ■	• Contract repapering
Models	■ ■ ■	• Develop €STR curves
Accounting	■ ■ ■	• Assess hedge effectiveness
Communication	■ ■ ■	• Renegotiation of legacy contracts

■ ■ ■ No impact
■ ■ ■ Low impact
■ ■ ■ Medium impact
■ ■ ■ High impact

Processes / Systems | From October 2nd, recalibrated EONIA is being published on T+1 with operational implications for Santander

- A** Data Capture
- B** Fixing & Settlement
- C** Valuation
- D** Accounting
- E** Collateral Management
- F** Reporting

T+1 Implications



Until October 2nd EONIA rate was published at 19:00h. The calculation relied on transactions executed on the same day of publication, before markets have closed (day T). However, from October 2nd it is being published at 9:15h on T+1

The delay in the publication of EONIA in T+1 implies that the price of day T, which is published on T+1 from October 2nd, is not available on T

Solution adopted

Capture and certification of EONIA data on T+1, after the time of publication (9:15h)

Use EONIA price published in T+1 to calculate the settlement amounts of transactions

Adjust the calculation of the transaction's mark-to-market (MtM)

Adjust the calculation of accrual interest for accounting purposes

Use EONIA price published in T+1 to calculate the settlement amounts of collateral interests

Adjust MMSR Reporting to include €STR-linked transactions



Settlement Process Impact by type of product

Product	Impact Description	Settlement time window ⁽¹⁾	
		AS IS	TO BE
Interest Rate Swaps	<ul style="list-style-type: none"> Due to the delay in the time of publication of EONIA, the price is available at 9:15h Therefore, the Back Office systems have been developed to capture the EONIA price close by 9:30h in T+1 Additionally, the combination of a delay in the calculation time and an unchanged settlement date has effectively shorten the time window between the moment the settlement amount is calculated and the date where this amount must be exchanged 	2 days	1 day
Equity Swaps		1 day <i>8:00h (T+1) - 16:00h (T+1)</i>	< 1 day <i>11:00h (T+1) - 16:00h (T+1)</i>
Repurchase Transactions ⁽²⁾		1 day <i>8:00h (T+1) - 16:00h (T+1)</i>	< 1 day <i>11:00h (T+1) - 16:00h (T+1)</i>
Collateral Interests		up to 15 days	up to 14 days

(1) Settlement time window (in days) between the last fixing date and the settlement date

(2) One-day Repurchase transactions

Thank You.

Our purpose is to help people
and business prosper.

Our culture is based on believing
that everything we do should be:

Simple Personal Fair



MEMBER OF
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