



EUROPEAN CENTRAL BANK

EUROSYSTEM

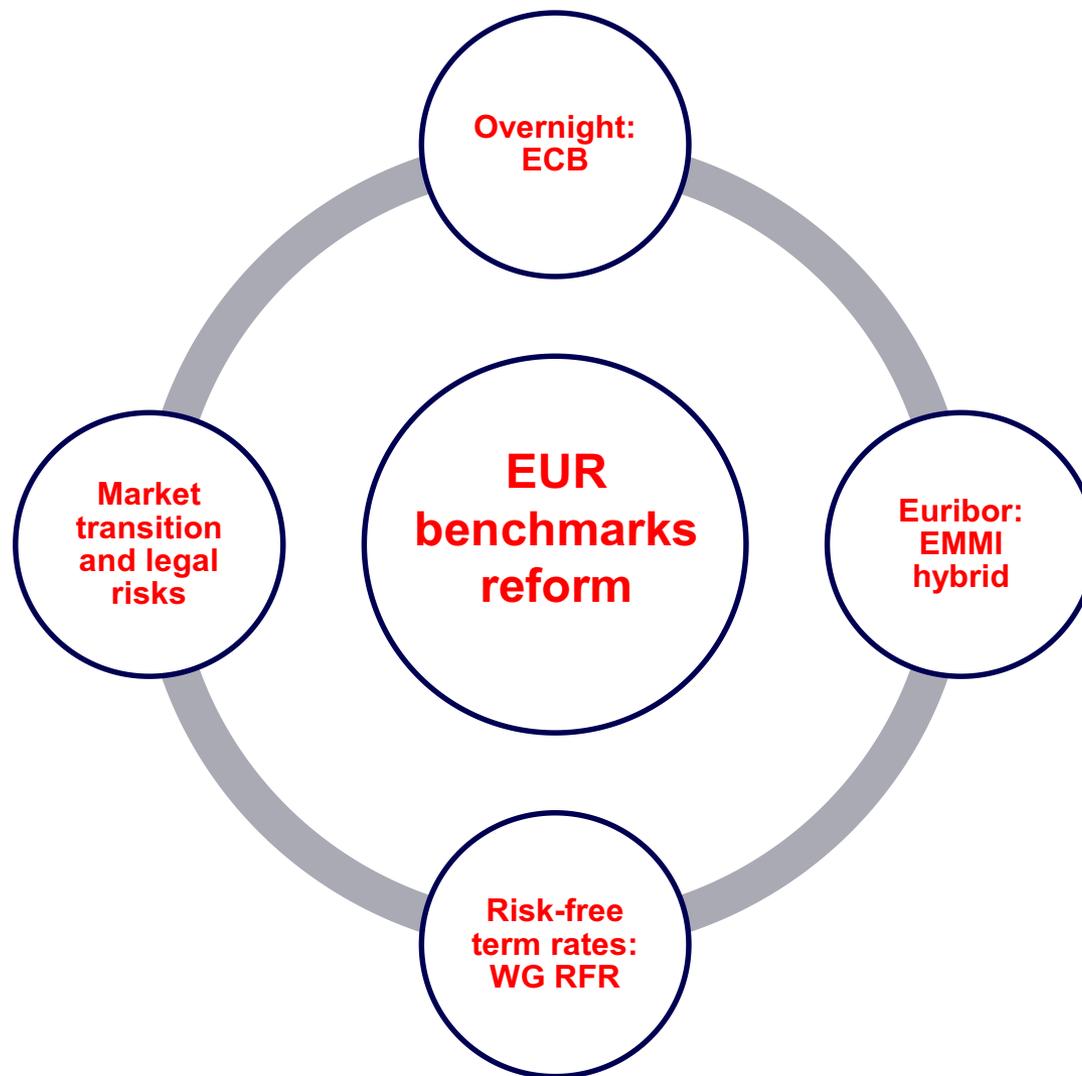
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Presentation of ESTER (Euro Short- Term Rate)

ECB roundtable on euro risk-free rates
Frankfurt, 9 November 2018

Foreword

ESTER part of a new navigation route to reform reference rates



Overview

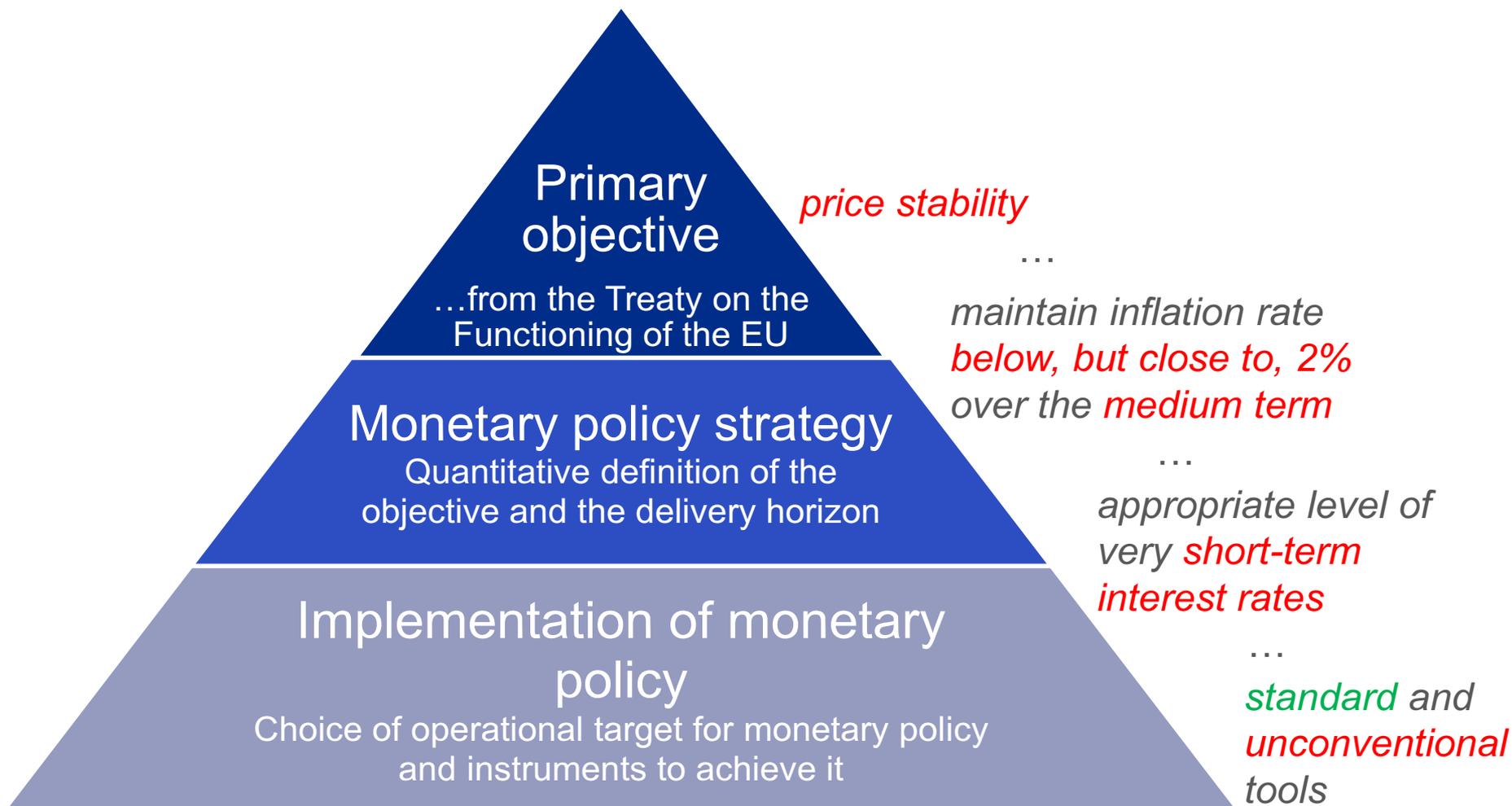
1 Why involve ECB in benchmark reform

2 Context, constraints, consultations

3 How ESTER works

4 Operational aspects

ECB is competent for monetary policy implementation and how it is met... but is not benchmark administrator



EONIA reform efforts at risk, ECB stepped in

- **EONIA low underlying volumes, high panel concentration: not compliant with the Benchmark Regulation**
- Banks leaving the panel
- Given the systemic importance of benchmark rates reform, ECB announced in September 2017:
 - The production of an overnight unsecured rate by October 2019
 - The setup of the Working Group on risk-Free Rates (WG RFR) led by ING, with ECB in charge of Secretariat
- EMMI and the panel banks announced the end of reform efforts early 2018: EONIA cannot be used in new contracts as of 1/1/2020

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Context (1): IOSCO principles



Governance

- Administrator role
- Control and oversight



Benchmark quality

- Design and data quality
- Hierarchy of inputs



Methodology quality

- Process transparency
- Internal controls on data



Accountability

- * Audit trail
- * Records

Not 'one size fits all' approach: to be applied where relevant and appropriate and proportionate to identified risk (e.g. manipulation)

ECB policy choice to implement the principles where relevant for ESTER, although they are not applicable to central banks.

Context (2): ESTER Guideline to be adopted

- **Dedicated ECB legal act** (e.g. Guideline) on top of MMSR and other statistical regulations to
 - Designate administrator
 - Establish **separate oversight function** within the Administrator entity
 - Adopt **control framework** to ensure integrity and reliability of benchmark
- **The separate oversight body** from the ESTER will challenge every aspect of the process and advise the decision making bodies

Constraints (1): New models, from quick and non-granular to delayed and granular

EONIA, Old Sonia:
published at the end
of the day but no
granular data: 1
number per bank

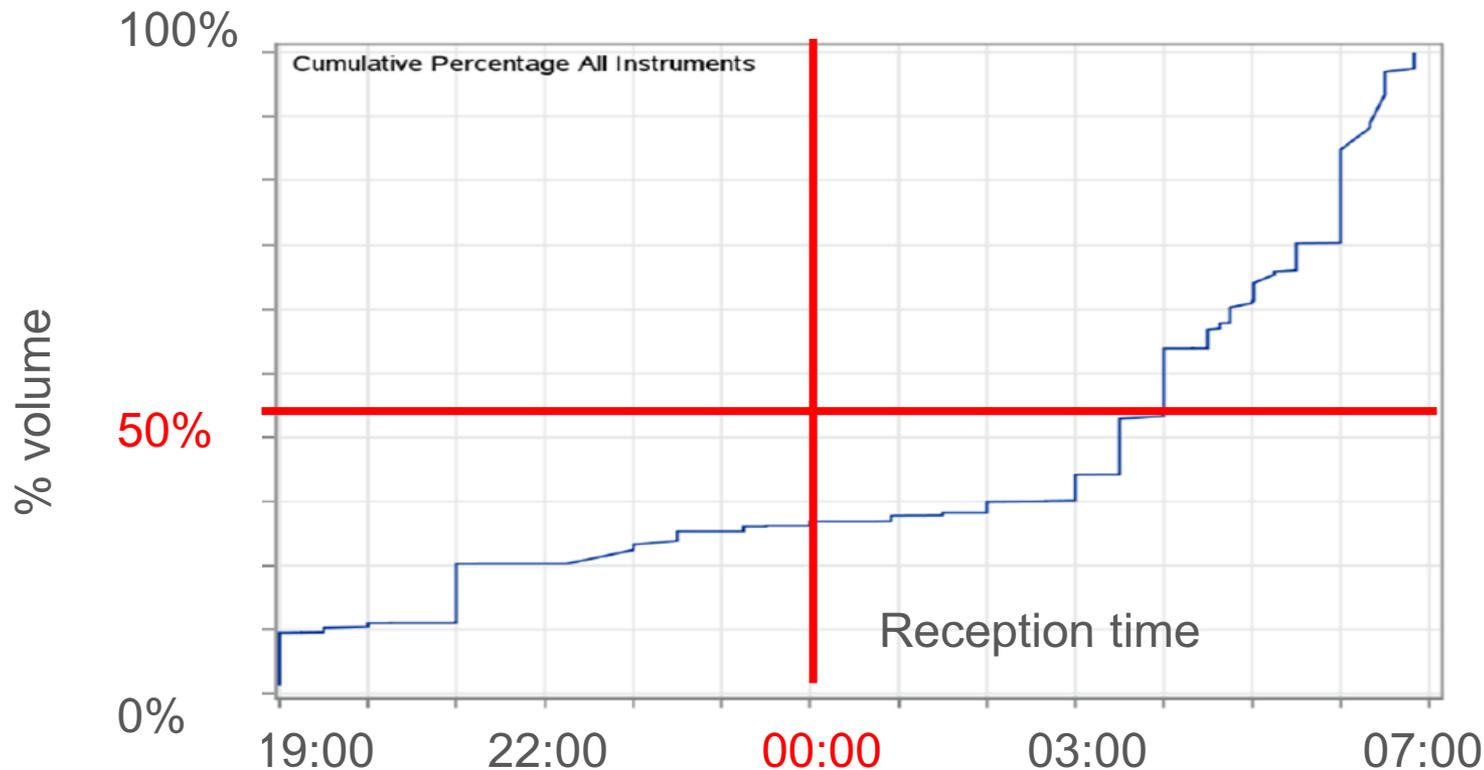
New SONIA, OBFR:
published one day
later at 9:00am based
on granular statistical
data: 500 to 1,200
trades

SOFR: published at
8:00am based on
granular data from
repo platforms,
several thousands
trades BUT already
confirmed

ESTER will be published by 9:00 the day after

Constraints (2): MMSR data collection constraint, same-day publication not a realistic option in the euro area

Volume unsecured in % received during night processes



Source: Eurosystem

Same-day publication

Not feasible as it takes time for reporting agents to prepare files
25% of unsecured volumes only received at midnight
MMSR data collection requirements not altered

Consultations: a new rate is born

August 2018

Public
consultation: 88%
of respondents in
favour of ESTER
versus GC
Pooling-Repo
Funds

13 September
2018

ESTER selected
by WG RFR as
EONIA
replacement

PR 13 September: ESTER [...] will be produced by ECB at the latest as of October 2019

Why not a secured rate comparable to SOFR: is volume everything?

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Main features of the rate

Scope: unsecured overnight deposits to measure borrowing costs

Calculation: weighted average, trimming 25%

Data sufficiency policy: contingency triggers (20 banks, 75% top 5 banks' concentration ratio)

Governance and processes: ESTER published by 9:00 am Frankfurt time

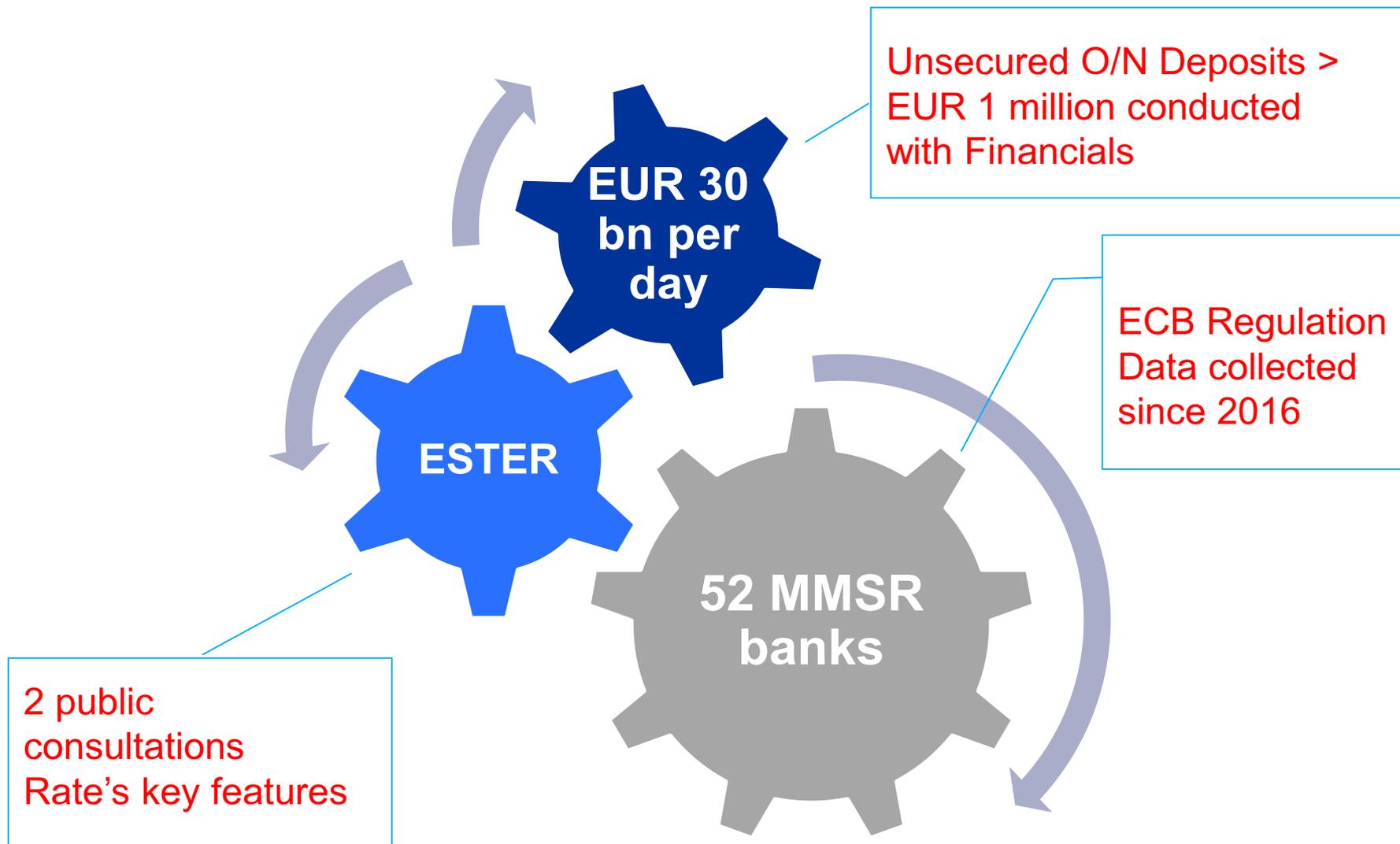
Publication policy and transparency on errors

Rate published daily by October 2019
Pre-ESTER publications since 28 June

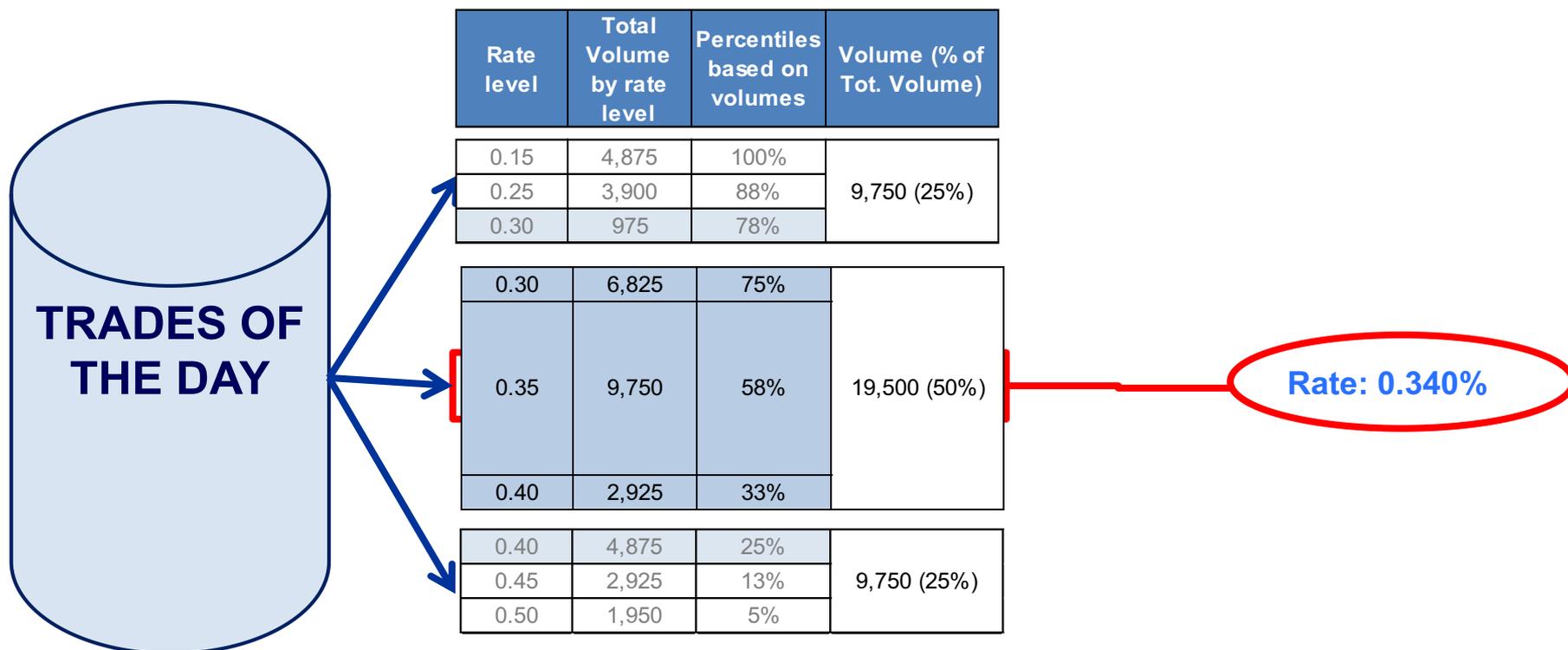
 Do you want to know more?

Parameters more detailed in the statement of methodology
https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/share_d/pdf/ecb.ESTER_methodology_and_policies.en.pdf

ESTER is fully transactions-based, and relies on clear computation parameters



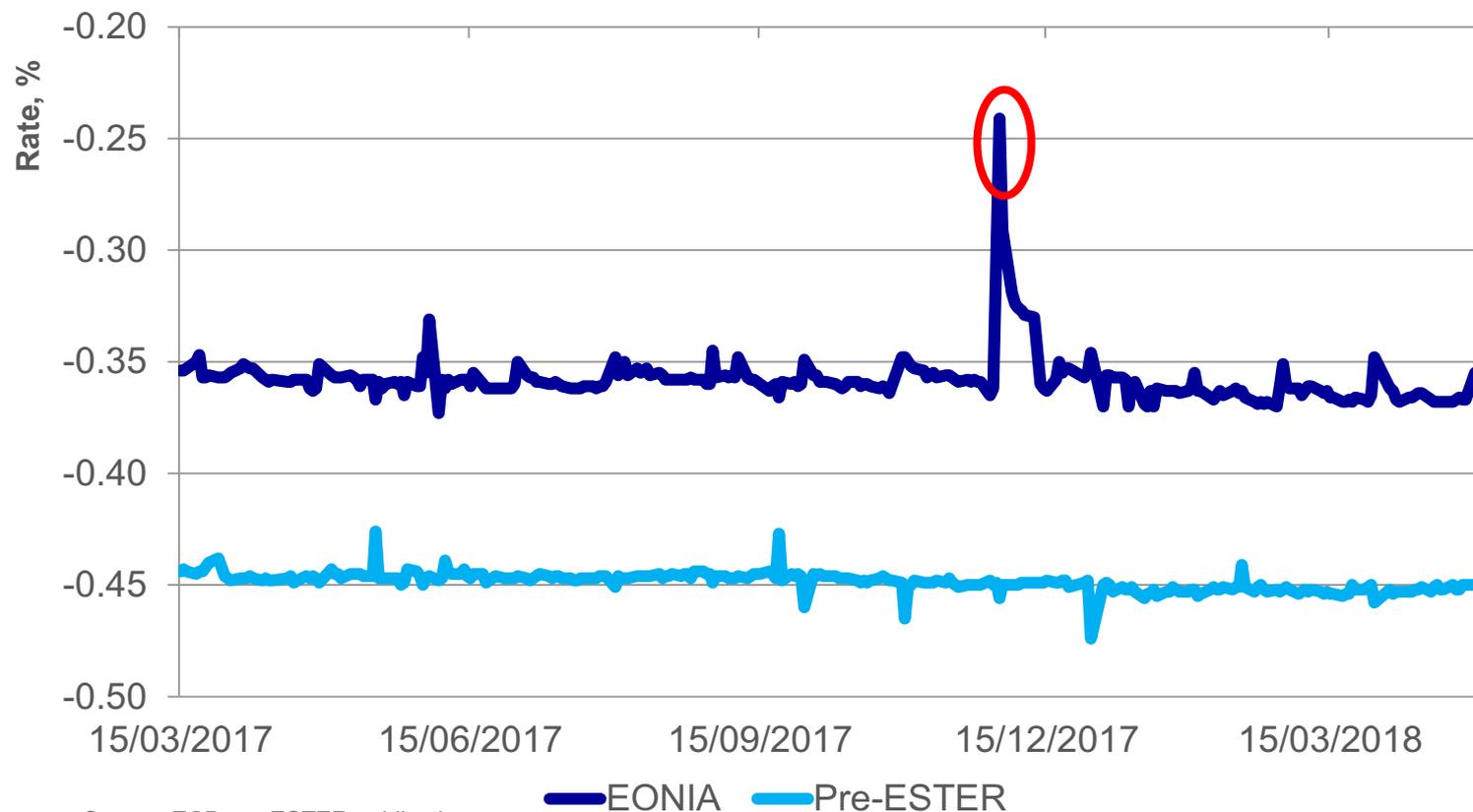
Trimming at 25% level – stylised example



No information loss:

- All trades used to determine ESTER
- ESTER calculation based on the centre of the trades' distribution

ESTER is quite stable

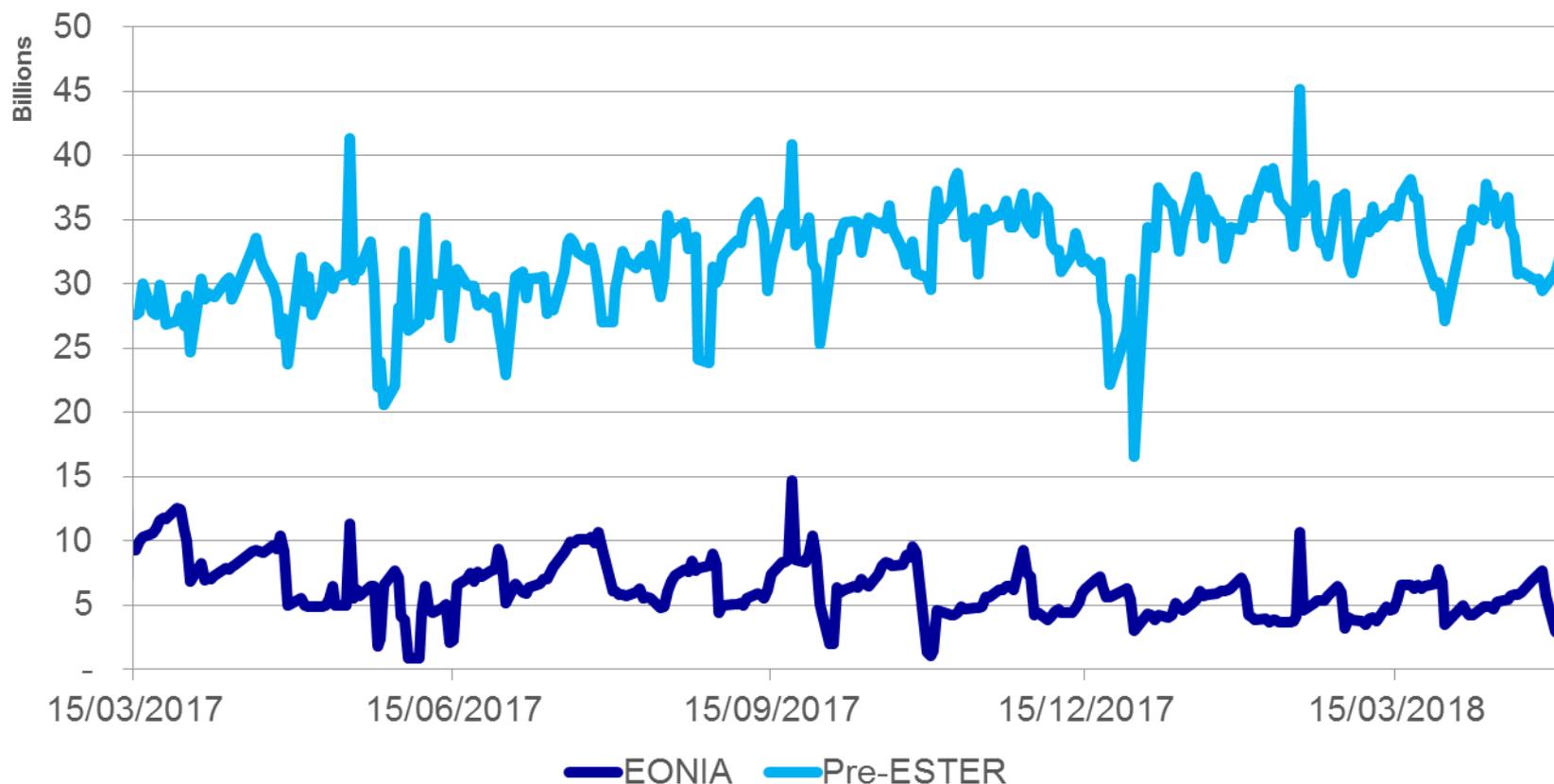


Source: ECB pre-ESTER publication

- Rate reacts to market factors (Excess Liquidity, rate falls at quarter-ends)
- While being less vulnerable to outliers
- Pre-ESTER (post corrections) very similar to ESTER (based on 7:00 data)
- Pre-ESTER data available on ECB website:

https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/euro_short-term_rate/html/index.en.html

Volumes are steady



Source: ECB pre-ESTER publication

ESTER volume remains in a range at high levels, falls at quarter-ends
Rate behaviour and volume represent a good compromise
Clear conceptual logic to measure borrowing costs

Rate robustness

	High	Low
Rate	-0.426%	-0.474%
Volume, EUR bn	44,084	16,478
Number of trades	635	264
Number of banks	35	25
Share largest 5 banks	66%	51%
Contingency triggers	No	

Contingency triggers

Source: ECB pre-ESTER publication

No contingency triggered by lack of transactions (data: March 2017 to May 2018)
Data sufficiency and low concentration

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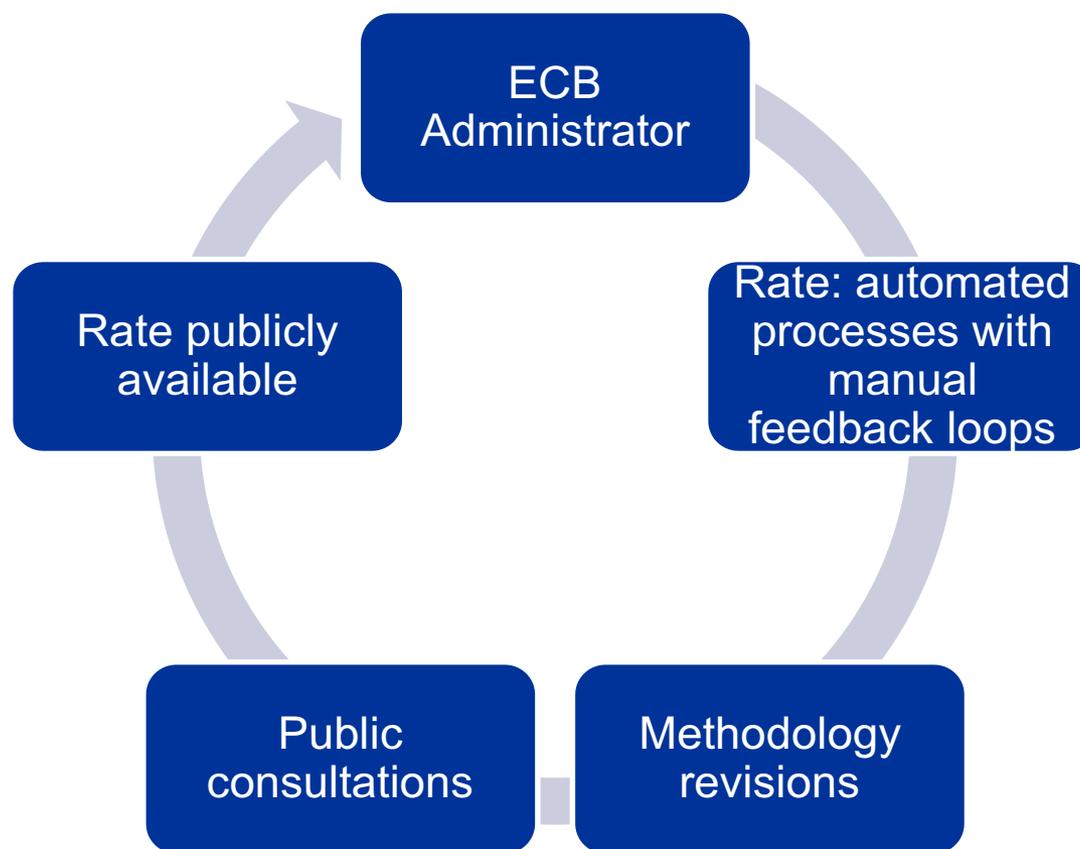
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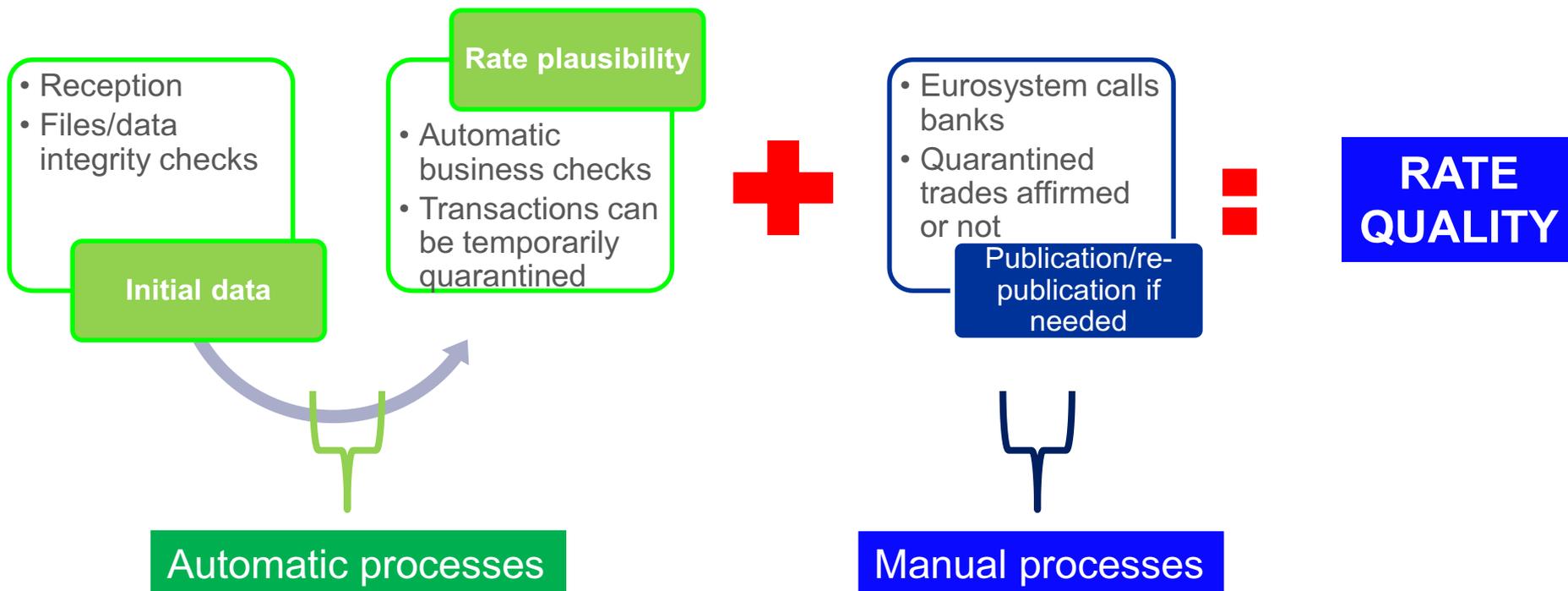
From governance to processes



At regular intervals, ESTER methodology will be re-assessed and

- Adapted with market changes,
- Or re-confirmed

Rate production process guarantees quality



Speed, timeliness and quality: differs from MMSR in terms of system criticality
This requires thorough testing which is taking time (=> by October 2019)
Eurosystem will call reporting banks to ensure highest quality possible

Market informed every day on how the rate was determined

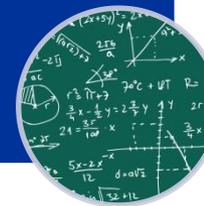
- 1) Rate, 3 decimals
- 2) Total volume
- 3) Number of transactions
- 4) Mode: normal, contingency

Rate
determination



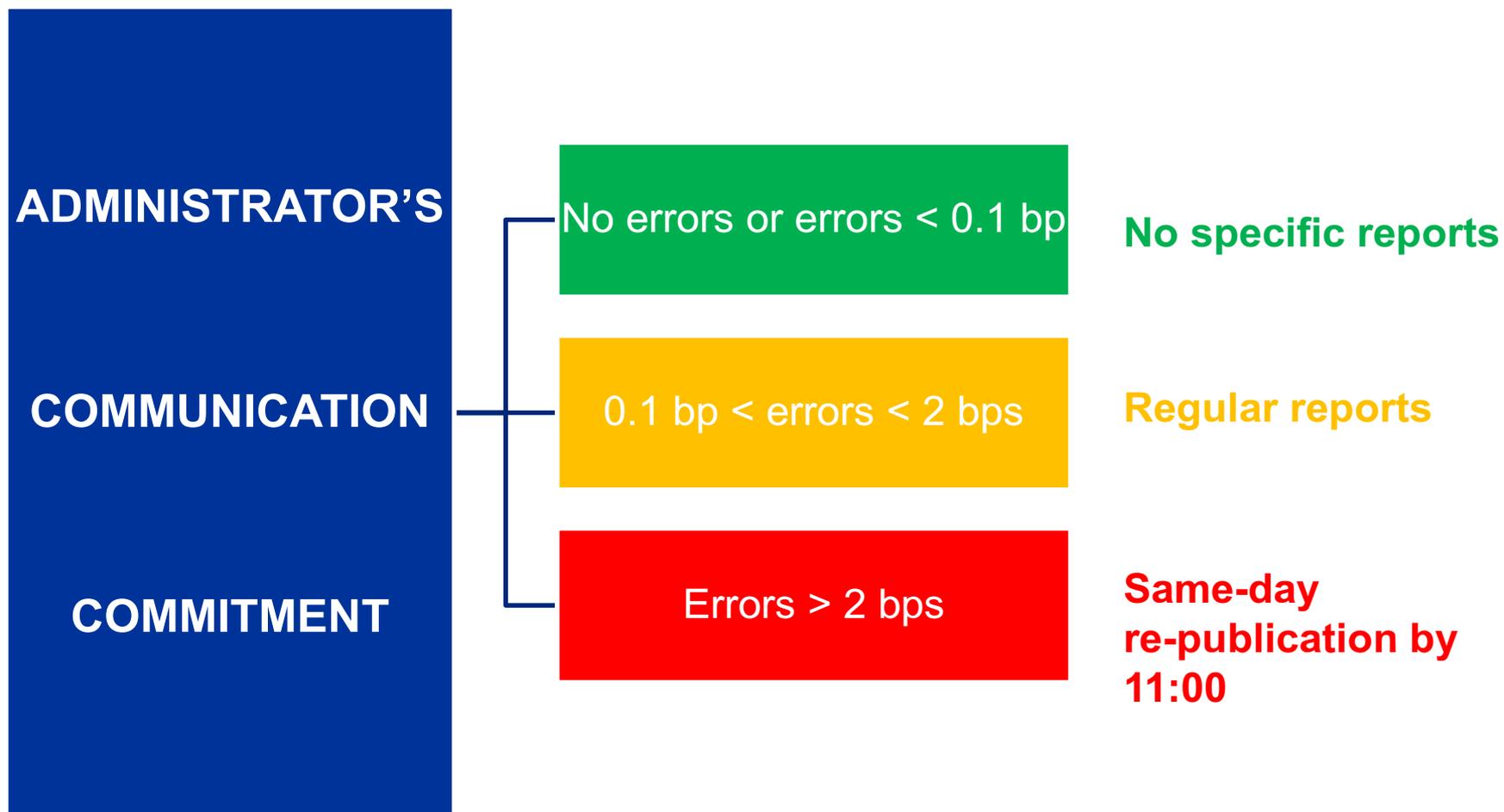
- 1) Number of banks
- 2) Share volume by largest 5 reporting banks
- 3) Rates at 25th and 75th percentiles

Additional
information



Rate is well explained to the markets and the public

Transparency policy: frequency of communication depends on importance of errors



Ad hoc communications if needed: transparency and flexibility
Re-publication risk: 1 occurrence in a year (technical issue)

Interlinkages **ESTER/work of the WG RFR on transition**

- BMR: EONIA cannot be used as of 1 January 2020, so the new rate is needed way before 1 January 2020 in order to phase out EONIA-based contracts (derivatives, repos)
- EONIA transition mostly impacts wholesale activities, rather than retail loans
- A BMR deadline extension was requested by the WG RFR to facilitate transition