



# EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS 2024 ESTORIL - PORTUGAL



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QUALITY IN OFFICIAL STATISTICS  
2024 ESTORIL - PORTUGAL

# Regulative, structural, and detailed improvements of national accounts data quality



eurostat 

The conference is partly  
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Three initiatives on how data quality for national and regional accounts is being improved in recent years:

### **Regulative**

- National quality reporting
- Eurostat report on national and regional accounts
- Commission report to the European Parliament and the Council

### **Structural**

- Benchmark revisions and the Harmonized European Revision Policy (HERP)
- Coordinated efforts for the 2024 benchmark revision
- Coordinated communication by the European Statistical System (ESS)

### **Detailed improvements**

- Thresholds for significant data revisions in regional accounts



## Regulative improvements of national accounts data quality

### ESA 2010 quality assessment framework

1. ESA2010 Reg. (549/2013, article 4&12)

⇒ report on quality to EP&Council

2. ESS quality framework

⇒ SIMS 2.0 by 2018

[Commission Implementing Regulation \(EU\) 2016/2304](#)

on modalities, structure and periodicity of quality reports



# Regulative improvements of national accounts data quality

## ESA 2010 quality assessment framework – main features

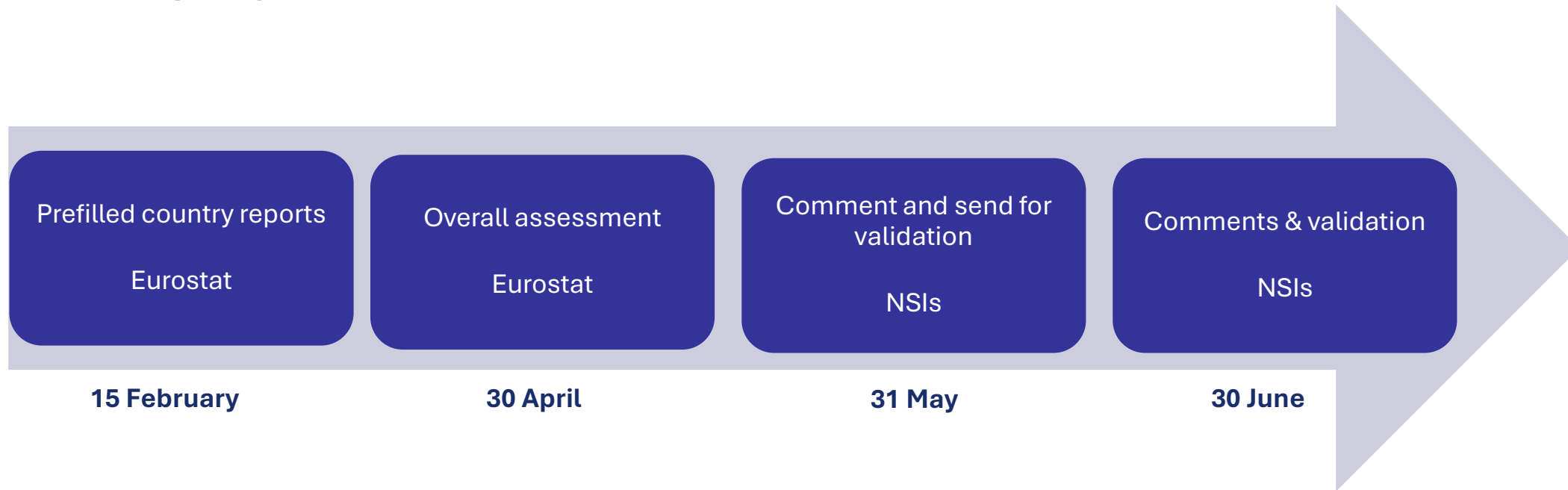
- Covering full ESA 2010 Transmission Programme/all domains
- Covering all ESS quality criteria
- Mainly quantitative approach
- Mainly prefilled by Eurostat
- To be commented and completed by Member States
- Frequency: partly annual
- No publication
- Serving as input for Eurostat quality report

- 1. Relevance**
- 2. Accuracy**
- 3. Timeliness**
- 4. Punctuality**
- 5. Accessibility & Clarity**
- 6. Comparability**
- 7. Coherence**



## Regulative improvements of national accounts data quality

### ESA 2010 quality assessment framework – timetable



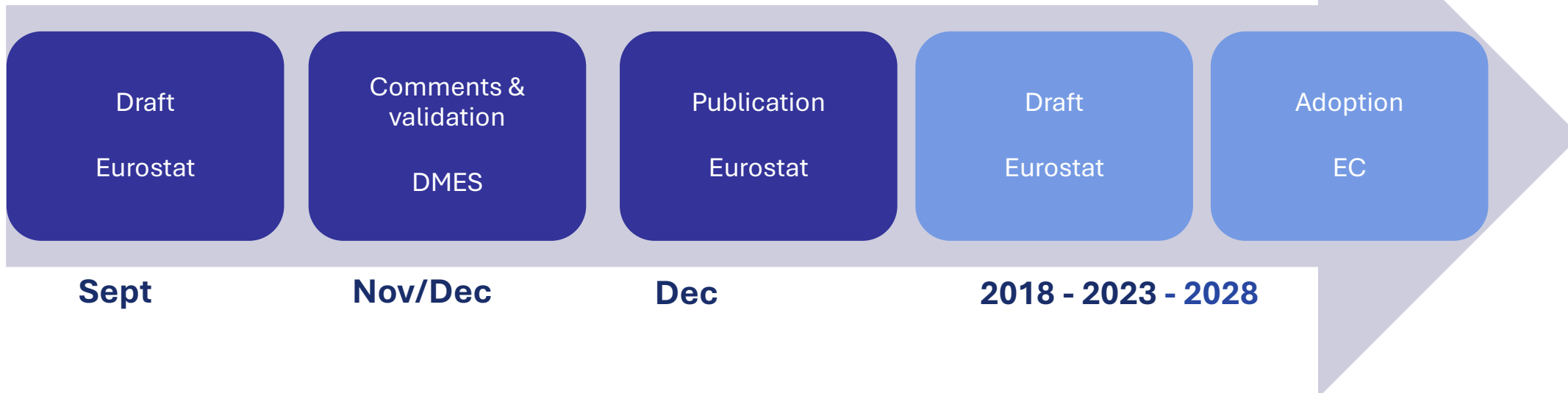


## Regulative improvements of national accounts data quality

### Eurostat's summary reports timetable

Eurostat quality report (MIP level 2 report)

Commission report  
to EP and the Council





# Structural improvements of national accounts data quality

## Benchmark revisions and the Harmonised European Revision Policy (HERP)

Benchmark revisions aim to improve the accuracy and comparability

### **Harmonised European revision policy (HERP)**

*aims to ensure coordinated and consistent revisions between the statistical domains*

### **Handbook on Practical guidelines for revising ESA 2010 (2019 edition)**

*good practices for routine and benchmark revisions*

### **Handbook on Consistency of ESA 2010 based national accounts (2020 edition)**

*aims to support compilers' efforts to improve the consistency of national accounts*

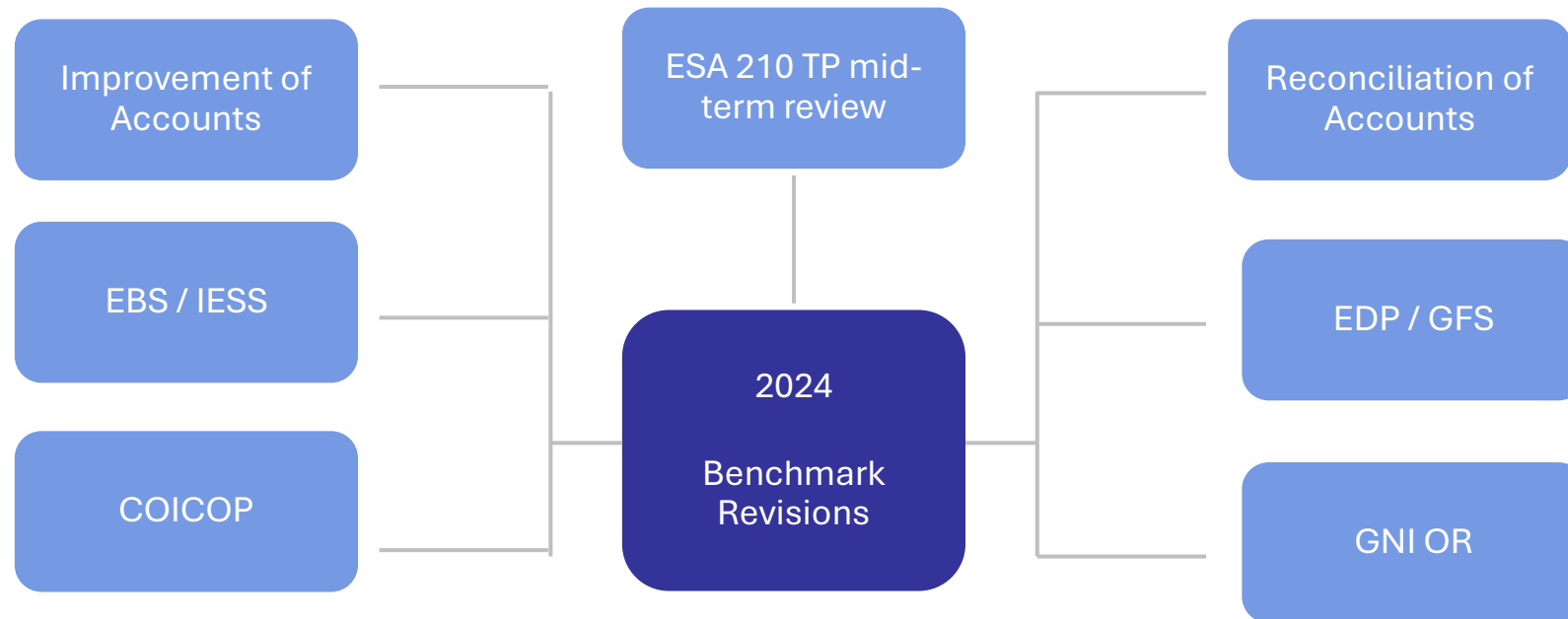




# Structural improvements of national accounts data quality

## Coordinated efforts for the 2024 benchmark revision

Main aspects impacting the 2024 benchmark revision





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# Structural improvements of national accounts data quality

## Coordinated communication by the European Statistical System (ESS)

Key aspect of the benchmark revision is communication.

Eurostat website to support the implementation of a coordinated ESS communication strategy on the 2024 benchmark revision.

[ESA 2010 Revisions](#)



# Detailed improvements of national accounts data quality

## Thresholds for significant data revisions in regional accounts

### Legal requirements in the revised ESA 2010 TP

*Article 11 defines the reporting of data specific metadata*

### Data-specific metadata

*comprised of general information, major events, **major revisions**, consistency, flags, zero & negative and methodological issues*

### How are defined the revisions to be reported in the data-specific metadata?

*threshold approach in regional accounts*



## Detailed improvements of national accounts data quality

### Thresholds for significant data revisions in regional accounts - dynamic percentile-based approach

#### Reporting criteria:

Revisions above the specific threshold by country, NUTS level and unit measures.

A **dynamic percentile-based approach** based on the number and distribution of historical revisions was used.

- Thresholds based on percentiles to flag revisions that significantly deviate from typical values.
- Variability of revision data to define country-specific thresholds.
- Annual updates to incorporate new data.



## Detailed improvements of national accounts data quality

### Thresholds for significant data revisions in regional accounts - algorithm

1. Filter data by **country**, **NUTS level** (2 or 3) and **unit of measure** (XDC, PS or HW).
2. **Historical data revision distribution** (2020-2023). Two types: absolute differences or percentages.
3. Set thresholds for both distributions:
  - If  $SD > \text{mean of SD across all countries}$  -> threshold = **95<sup>th</sup> percentile**;
  - If  $SD \leq \text{mean of SD across all countries}$  -> threshold = **98<sup>th</sup> percentile**.
4. Refine thresholds by including **lower and upper bounds** for each unit measure.



**SIGNIFICANT REVISION** = any revision above at least one of the value corresponding to the defined percentile thresholds (in difference OR percentages).



## Detailed improvements of national accounts data quality

### Thresholds for significant data revisions in regional accounts – algorithm refinements

	Lower Bound		Upper Bound	
	Difference	Percentage	Difference	Percentage
XDC	100 (million EUR)	3%	1000 (million EUR)	25%
PS	5 (thousand)	3%	10 (thousand)	25%
HW	5 (million)	3%	10 (million)	25%

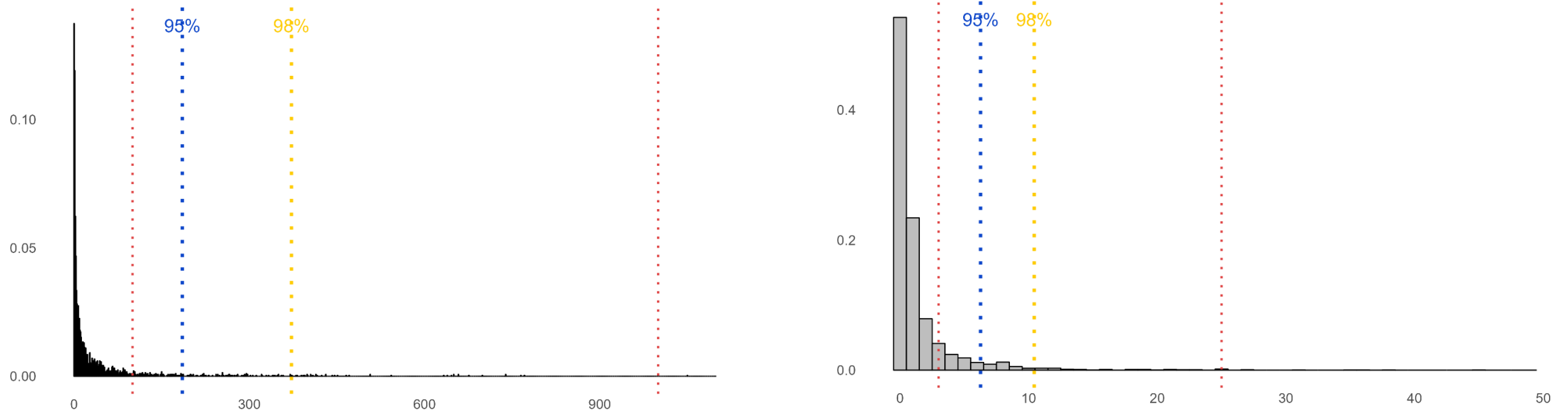
#### Other refinements:

- The threshold for NUTS level 3 cannot exceed that of NUTS level 2 for any given country, and if it does, the thresholds are set to be equal to those defined for NUTS level 2.
- All data in national currencies was initially converted to euros. The data was then reverted to its national currency when setting final thresholds.
- Thresholds were rounded to the nearest hundred (XDC); to the nearest fifty (HW), to whole numbers (PS).



## Detailed improvements of national accounts data quality

### Thresholds for significant data revisions in regional accounts – algorithm example



Distribution of XDC historical data revisions expressed in absolute difference (left) or percentages (right) for NUTS 2 regions of BE.



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# Thanks!

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