

Quality Reviews in Eurostat

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Abstract

The self-regulatory common quality framework of the European Statistical System (ESS) is built around the principles and the indicators of the European Statistics Code of Practice (ES CoP) and the methods and tools of the Quality Assurance Framework of the European Statistical System (ESS QAF). It is, however, through quality reviews that Eurostat can monitor internally the ES CoP implementation at the level of specific statistical processes and outputs. This assurance mechanism complements the ESS peer reviews, which scrutinise the system mainly at institutional level. The aim of this paper is thus to describe and analyse this operational quality assurance layer that bridges the 'theoretical' quality framework and the 'practical', every-day aspect of developing, producing, and disseminating European statistics. By doing so, this paper shares Eurostat's methods and good practices for further use within the ESS, particularly within organisations that are yet to develop or still in the process of developing and implementing their own quality assessment methodologies. As the current cycle of quality reviews is coming to an end, also some results of the already implemented reviews are discussed and conclusions are drawn.

Keywords: quality reviews; quality assurance; quality assessments

1. Introduction

The common quality framework of the European Statistical System (ESS) is built around the principles and the indicators of the European Statistics Code of Practice (ESCoP)¹ and the methods and tools of the Quality Assurance Framework of the European Statistical System (ESS QAF)². This self-regulatory common quality framework complements the extensive legal framework of the European Statistical System, which is based on Regulation (EC) No 223/2009 on European statistics and sectoral legislation. High-quality European statistics and services are therefore developed, produced and disseminated in a very robust legal and quality environment.

To ensure the application of the top layers of the statistical quality framework at Eurostat, there is a complementary, operational layer of quality assurance, which encompasses on the one hand, the quality monitoring in the form of quality controls, validations and quality checks done by the statistical domains themselves, and on the other hand, the quality assurance implemented by the Quality Team in the form of quality reviews, quality reporting activities,

¹ European Commission (2017)

² European Commission (2019)

error management, etc. It is through quality reviews that Eurostat can monitor the implementation of the European Statistics Code of Practice at the level of specific statistical processes and outputs. They complement the ESS peer reviews, which take place at institutional level.

The aim of this paper is thus to describe and analyse this operational quality assurance layer that bridges the 'theoretical' quality framework and the 'practical', every-day aspect of developing, producing, and disseminating European statistics. By doing so, this paper shares Eurostat's methods and good practices for further use within the ESS, particularly within organisations that are yet to develop or still in the process of developing and implementing their own quality assessment methodologies. As the current cycle of quality reviews is coming to an end, also some results of the already implemented reviews are discussed and conclusions are drawn.

2. Background and rationale

Quality reviews are in place since 2019, replacing what was previously called quality assessments. They form an integrated part of Eurostat's quality assurance and have a two-fold purpose:

- Quality reviews aim to reassure management that Eurostat's processes are broadly compliant with the ESCoP and the ESS QAF to which Eurostat should adhere as a standard setter and member of the ESS;
- Quality reviews seek to improve processes and resulting products and services (outputs). It is worthwhile mentioning in this context that both the ESCoP and the ESS QAF make reference to a continuous improvement of process and output quality.

There are various benefits from implementing quality reviews. In particular they:

- enhance output quality (user satisfaction) as well as process quality (producer oriented) through specific process-level improvement actions;
- improve horizontal/support processes through the identification of recurrent and horizontal areas for improvement;
- promote the sharing of good/best practices and benchmarking;
- support continuous improvement and drive change in line with best practices in modern organisations;
- promote efficiency gains at process and corporate levels;
- provide re-assurance to senior and middle management of the correct implementation of the quality framework at process and output levels;

- ensure compliance with indicators 4.2 and 4.4 of ESCoP.
- support the European Statistical Programme (ESP) and Annual Work Programme (AWP) key objectives.

3. Scope, typology and definitions

Quality of statistics is defined along three lines in the ESS: institutional environment, the underlying statistical processes and statistical output. These three aspects are defined in terms of quality principles and indicators that compose the European Statistics Code of Practice.

To ensure the above-mentioned quality dimensions are covered in an effective and efficient manner, Eurostat has adopted the so-called mixed approach in quality reviews according to which a fixed proportion of 'critical' statistical processes are covered by centralised quality reviews while the rest of the 'less critical' processes are reviewed in a decentralised manner.

The main output of the both types of quality reviews is the **Quality Review Report**, which is a document containing the principal strengths, improvement areas and a corresponding action plan, mutually agreed by the all the stakeholders mentioned in the report. This document is preceded by a **Checklist**, which is a predefined analytical questionnaire, aiding and standardising the quality review process. The major difference between the decentralised and the centralised quality reviews encompasses the process how these two documents are handled, which briefly defines each type as follows:

- **Centralised quality reviews** are conducted under the responsibility of the Quality Reviews Team. The Quality Reviews Team launches the review, pre-fills the Checklist, prepares follow-up questions based on the documentation provided and the Checklist filled in by the production unit in charge of the process under review, and then proposes improvement actions by filling in the reporting template. This Quality Review Report is finalised and validated in cooperation with the production unit and all horizontal units concerned (in case improvement actions of horizontal nature are identified).
- **Decentralised quality reviews** remain under the responsibility of the production units themselves and are managed by them. The Quality Reviews Team provides support and advice, is in charge of organising the meeting(s) validating the Quality Review Report and is available to reply to questions and clarification requests the production units might have.

4. Methodological and operational framework

The quality reviews cycle was officially launched in July 2019. The methodology was thoroughly consulted with the production units in Eurostat. It is published on the intranet pages

of the Quality Team in Eurostat. A mixed approach for conducting quality reviews was defined as an equal split of centralised implementation of quality reviews for 'critical processes' (50%) and a decentralised implementation of self-quality reviews for 'less critical processes' (50%).

To ensure the effectiveness of the quality reviews, the process adopted by Eurostat follows a well-established workflow, with defined roles and responsibilities of the stakeholders. The Process Owner in charge of supervising the functioning of the quality review process at Eurostat level is the Director responsible for quality issues. The Quality Reviews Team is responsible for the planning, the steering and the monitoring of the quality reviews. In this regard the team prepares timetables, drafts analyses and reports, coordinates the communication among the stakeholders and monitors follow-up implementation of the exercise.

The Quality Reviews Team operates within a Mandate adopted by a decision of the Directors' Meeting at Eurostat. The Mandate describes the information needs as well as the principles based on which quality reviews are conducted. The output of the Quality Reviews is the principal strengths, improvement areas and a corresponding action plan, as they are documented in the Quality Reviews reports.

According to the mandate the following principles are fundamental for conducting the quality reviews:

- Objectivity and independence
- Accountability

The Quality Reviews Team collaborates at operational level with the Process Manager, who is in charge of the statistical process under review.

For centralised quality reviews, the Process Manager is responsible to verify and add missing information in the pre-filled Checklist and provide feedback to the additional questions prepared by the Quality Reviews Team.

For decentralised quality reviews the Process Manager is responsible to fill in the Checklist and draft the Quality Review Report, in cooperation with colleagues from the unit/Directorate/other Directorates of Eurostat. While the Quality Reviews Team is not directly responsible for filling in the Checklist and drafting the Quality Review Report, these two deliverables are provided by the Process Manager to the Quality Reviews Team for initial verification. The Quality Reviews Team can return each of the two deliverables with requests for validation and rectifications. This has a two-fold purpose, on the one hand it is a measure to avoid conflicts of interest and the impairment of objectivity of self-review in the production units and on the other hand, it brings the documentation to a more coherent standard across the various statistical processes under review.

The role of the Head of Unit in charge of the process ('Process Owner') is to review and approve the Quality Review Report covering the improvement actions identified, together with their priority, status and deadlines. In addition, the Quality Reviews Team also accompanies the production units throughout the quality review process by providing help and advice and proposing clarifications and fine-tuning to the Quality Review Report, based on the quality-related knowledge and experiences of its team members. The formal agreement of the Quality Review Report is done at a validation meeting steered by the Quality Reviews Team and attended by the Process Owner, the Process Manager and all other stakeholders mentioned in the report, or alternatively, by a written consultation and agreement of the abovementioned stakeholders.

5. Preliminary results

The period for conducting the full cycle of quality reviews is 2019-2024. This period covers carrying out 77 quality reviews, of which 38 are centralised and 39 decentralised. Table 1 below presents the distribution of the quality reviews over the years.

Table 1: Number of quality reviews by type and start year.

Year	Centralised Quality Reviews	Decentralised Quality Reviews
2019	6	4
2020	4	3
2021	7	16
2022	9	11
2023	5	5
2024	7	
Total	38	39

Of these 77 quality reviews, 61 (79%) were closed by end of April 2024, 15 (19%) are still ongoing and 1 quality review is yet to be launched in June 2024. This means that about 13 quality reviews were closed per year on average. The average time needed to conduct a review on a statistical process from the formal launch until the closure and registration of the final Quality Review Report in the Commission’s document management system was 413 days with a small difference between average time for centralised quality reviews (421 days) and decentralised quality reviews (406 days). The shortest period that was needed to conduct a

quality review was 100 days, while for the longest one, it took a little over two years due to various delays mainly related to limited resources and priorities for the Process Owner.

6. Conclusions and lessons

The following lessons and conclusions could be derived from the cycle of Eurostat quality reviews, which is in its final phase:

- The methodology of quality reviews needed to balance the level of ambition expressed by the resources devoted for this purpose, with the objective of ensuring quality for all processes. Balancing these elements led to the development of a mixed-approach methodology where only critical processes are covered by centralised quality reviews. It was not evident however that in all cases the production units at Eurostat were capable to conduct a decentralised review of sufficient quality without the extensive support by the Quality Reviews Team, which raises questions on the merits of the mixed approach.
- The previously used quality assessment methodology did not facilitate buying-in by the production units. This led to the development of the present methodology which is more focussed on improvements and therefore, more prone to be internalised by the units. It should be noted that some of the most useful recommendations include one leading to joint actions, where the collaboration at various levels and among different units was necessary.
- There was a need to put together all material related to quality reviews and to make it widely accessible. The development of methodological guidance and the related tools and procedures had a significant impact on the learning curve both of the Quality Reviews Team and of the production units, especially when newly recruited staff was involved. Furthermore, broader knowledge in the ongoing ESS processes and developments in the field of quality of official statistics has generally an improving effect on the processes both from the point of view of the reviewers and for the reviewees.
- The statistical production processes under review had different complexities both on the methodological and on the process level. This often called for a more flexible approach in the individual quality reviews. On the other hand, the perceived uniqueness of the process was sometimes exaggerated. However, the outcomes of quality reviews often revealed similarities in areas needing improvement when compared with other processes. Therefore, recurring issues in the methodology should be systematically collected and reflected in the internal manuals and guidelines.

- The validation procedure of the quality review reports sometimes required more effort than expected. Fair communication and acceptance of improvement proposals on the one hand and considering constraints of the units to implement these improvements on the other hand are crucial for the success of each quality review. Reviewers should be able to clearly point out those issues observed during the reviews and accept arguments, proofs and explanations from the reviewees. On the other hand, the reviewees should be open to ideas and critical views, accepting and contributing to the design and the implementation of the related improvement actions.

References

European Commission (2017), [European Statistics Code of Practice](#).

European Commission (2019), [Quality Assurance Framework of the ESS](#).