



Report on the quality of official statistics, 2025

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Preface

Section 6 of the Act relating to official statistics and Statistics Norway, the Statistics Act, (SSB 2019a) of 2019 states that Statistics Norway shall submit an annual report to the Ministry of Finance on the quality of official statistics. The Ministry's letter of allocation for 2025 to Statistics Norway states that, as a priority, Statistics Norway shall ensure cooperation, coherence and quality in the Norwegian statistical system. This is the fourth report on the quality of all official Norwegian statistics.

This report is based on the information and quality assurance systems that are available at the time of reporting. The assessments and recommendations take a comprehensive view of the production of official statistics whenever possible.

The report has been discussed by the Committee for Official Statistics (SSB, 2019b) and the Council for Statistics Norway.

Statistics Norway, 5 June 2025

Geir Axelsen
Director General

Summary

Key findings

The main source of information for this report is the annual quality evaluation of all producers of official statistics. The quality evaluation has been carried out at statistical level for the second time. Self-assessments for all statistics in the national programme for official statistics 2024–2027 (SSB, 2024) and information from follow-up meetings with statisticians constitute the factual basis for this evaluation. A questionnaire on compliance with quality requirements was completed for the self-assessments.

The results of the quality evaluation show good compliance with many of the quality requirements in the Statistics Act and the European Statistics Code of Practice (Eurostat, 2017). In most areas, the results are at approximately the same level as last year. There are substantial variations between producers in the compliance with certain requirements. One improvement from last year is that more statistics have written internal documentation concerning how the statistics were produced. For some of the quality requirements, greater awareness and compliance are still needed. This particularly applies to the quality requirement concerning statistical confidentiality. For many statistics, there is a need to replace manual procedures and self-written code with recognised methods and software for safeguarding statistical confidentiality.

Another source used in this year's report is a review conducted by Statistics Norway of the dissemination of statistics by the producers. In the case of some producers, it is difficult to find the official statistics via search engines or the website. There are also deficiencies linked to metadata and user-oriented documentation of the statistics, and in procedures for the advance announcement of publication dates.

The solutions used for the production and dissemination of official statistics are fragmented. Each of the 16 producers primarily uses their own solutions throughout the production cycle, from the collection of data to the dissemination of statistics. In some domains, such as dissemination, documentation and metadata, there is considerable potential for streamlining and stronger user orientation through the establishment of common solutions across the producers.

Overarching recommendations

One of the key findings, discussed above, is that there is considerable variation in the dissemination of statistics and a lack of common solutions across the statistics producers. Previous initiatives in this area have yet to result in specific solutions which are used across the producers. In order to expedite the work to establish and introduce common solutions, there is a need to work in a more targeted and binding way. It is recommended that a review be conducted of the needs and opportunities related to the development, funding and management of common solutions across producers of official statistics, within the areas of dissemination, metadata and documentation. Several producers should make it easier for users to find official statistics via search engines and the website.

Several recommendations from earlier reports are still applicable for several of the producers. All use of self-made software and manual processes for managing statistical confidentiality should be phased out over time. This can be a resource-intensive process, involving the building of competence concerning methods and software for confidentiality. It is important that statistics producers draw up specific plans for this work. Other recommendations that are still applicable include improved user contact, communication of uncertainty, improved and standardised documentation, and greater use of quality indicators.

Improvement measures

An important part of the quality system is the implementation of improvement measures based on the recommendations in the annual report on the quality of official statistics. The implementation of improvement measures helps to improve compliance with the quality requirements. In the wake of the publication of the annual quality report, the statistics producers consider the need for new measures based on the recommendations in the report. They also prepare and submit annual reports on the status of reported measures. The status report in February 2025 covered 228 measures, and 52 per cent of the measures since 2022 have been implemented.

Although many measures have been planned and implemented, there are still recommendations – particularly regarding quality indicators, uncertainty and confidentiality – for which further measures should be identified and implemented to improve compliance with the quality requirements. These may require additional resources, and this must be assessed against the opportunities for quality gains. Both the recommendations and the measures vary in complexity, scope and effect. Some are simple and have limited effect, while others – such as common solutions – could lead to major benefits for many. Counting measures may indicate the level of activity, but it does not give an adequate picture of quality improvement. In order to assess the effect, quantitative counts must be supplemented with qualitative assessments of, for example, compliance with standards or user satisfaction.

Developing the quality system

The system for the quality assurance of official statistics is being developed gradually over time in order to adapt the system to technological advances and other societal considerations.

Statistics Norway is currently undertaking a comprehensive modernisation process, with the most important development initiative being the transition to a new, cloud-based data platform (Dapla). This transition means that current statistics production solutions must be re-written in new coding languages and adapted to the cloud-based platform. The platform will enhance Statistics Norway's ability to meet increasing user expectations and benefit from technological development. The transition also entails a number of challenges. During the transition period, Statistics Norway will need to handle both existing infrastructure and production systems and the new cloud-based solution, as well as the integrations between the two systems. This complexity increases the risk of security issues and quality problems. Over the coming years, the work relating to the transition to a cloud-based platform and the challenges this entails must also be reflected in the quality work. An assessment must be made of how the modernisation process is impacting the quality of Statistics Norway's statistical products. The established tools of quality reviews and quality evaluations will be well-suited to monitoring the transition process.

In March 2025, the United Nations Statistical Commission endorsed a maturity model for quality culture. More consideration must be given to whether, and potentially how, the model can be used by Statistics Norway and the Norwegian statistical system.

In 2024, Statistics Norway reviewed the organisation of the Committee for Official Statistics on behalf of the Ministry of Finance. In 2025, a working group will be established comprising six committee members who will assist in the coordination and planning of the committee's work. The aim is to strengthen the coordination, quality and development of official statistics in Norway.

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1. The quality system for official statistics

1.1. The Norwegian statistical system

The Statistics Act stipulates that Norway shall have a multi-year, national programme for official statistics. This forms the basis for the national statistical system. The programme specifies the statistical domains that are to be covered and the public authorities that are responsible for the individual statistics. The statistical system encompasses the statistics under the programme, the authorities responsible for them, and other actors and forums involved in coordinating official statistics.

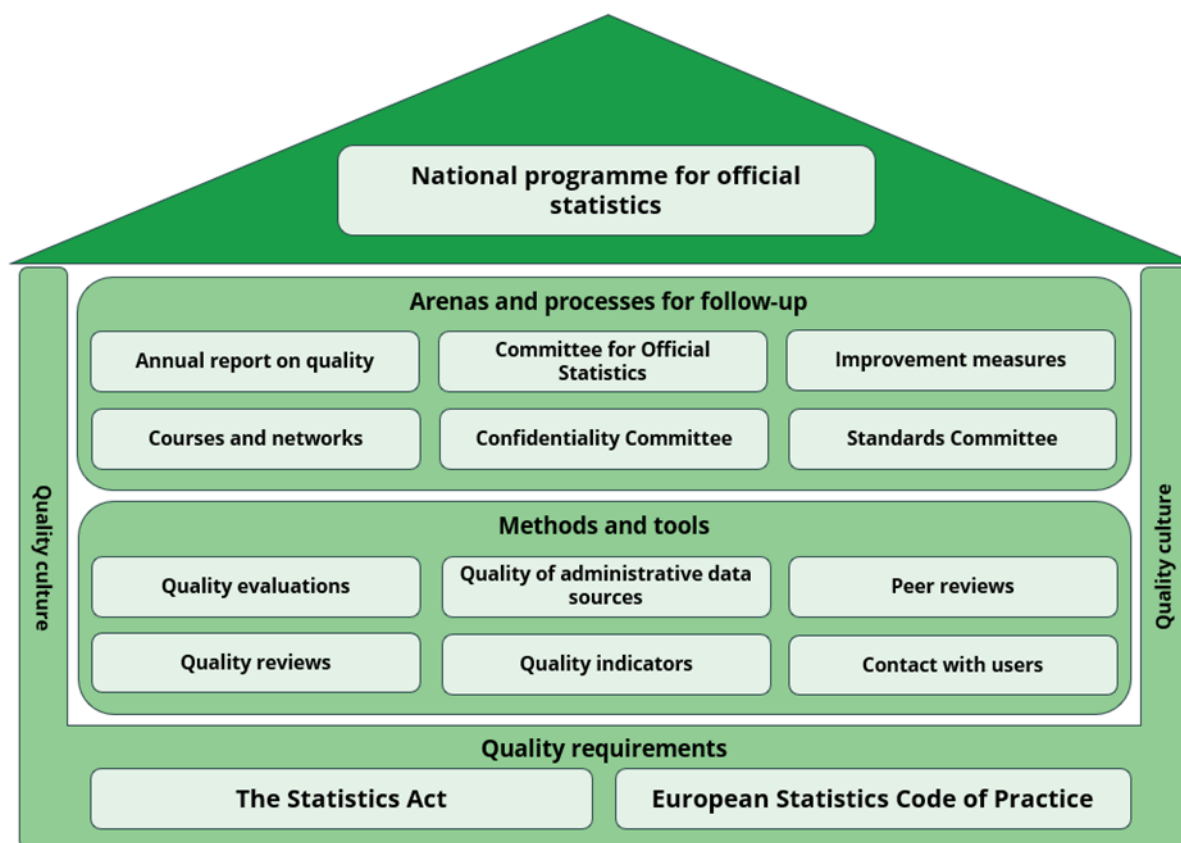
The Committee for Official Statistics assists Statistics Norway in coordinating the development, production and dissemination of official statistics and helps ensure that the national statistical system is fit for purpose and effective. From January 2024, the committee was expanded through the addition of five new public authorities and now has 32 members. All the producers of official statistics are members. The other members are owners of administrative information systems that are sources for official statistics, or authorities involved in cooperation related to official statistics. The committee contributes to the quality assurance of the annual report on the quality of official statistics. See Chapter 5.1 for more information on the work of the committee during the past year and the establishment of a working group in 2025.

1.2. About the quality system

The quality system for official statistics is intended to safeguard the quality of official statistics and consists of the following key elements:

- *The quality requirements defined in the Statistics Act and the European Statistics Code of Practice.* These form the foundation of the quality system and are discussed further in Appendix C.
- *The national programme for official statistics (the statistical programme).* The programme defines what constitutes official statistics and specifies which statistical domains are to be covered and which public authorities are responsible for the statistics.
- *Methods and tools for measuring and assessing the quality of official statistics.* The various methods and tools form the basis for assessing the quality of official statistics and how different aspects of quality develop over time.
- *Arenas and processes for monitoring quality.* The various processes and arenas provide the basis for improvements and competence building and can aid with defining and producing guidelines for effective compliance with the quality requirements.
- *A quality culture throughout the production of statistics and the quality system, in which all organisation levels take responsibility for ensuring good quality in the statistics.* The follow-up of the quality system helps to build a quality culture. The implementation of quality evaluations, courses and networks for dissemination and methodology is important in this work.

The quality system is illustrated in Figure 1.

Figure 1.1 The quality house – the quality system for official statistics

Source: Statistics Norway

1.3. The statistical programme and producers of official statistics

In December 2023, the Norwegian government approved the second national programme for official statistics for the period 2024–2027. The programme contains 86 measures for the development of official statistics (SSB, 2024), spread across many statistical domains. They safeguard important user needs which emerged during the programme work and the public consultation. The statistics producers are responsible for following up on data access, funding and other factors that need to be in place to carry out the development work during the programme period.

In 2025, there were 16 producers of official statistics:

- Norwegian Labour and Welfare Administration (NAV)
- Norwegian Agency for Public and Financial Management (DFØ)
- Norwegian Directorate of Fisheries
- Norwegian Institute of Public Health (NIPH)
- Directorate of Integration and Diversity (IMDi)
- Norwegian Agriculture Agency
- Norwegian Food Safety Authority
- Norwegian Meteorological Institute
- Norwegian Environment Agency
- Norwegian Agency for Development Cooperation (Norad)
- Norwegian Institute of Bioeconomy Research (NIBIO)
- Norwegian Communications Authority (Nkom)
- Norwegian Water Resources and Energy Directorate (NVE)

- Norwegian Offshore Directorate
- Norwegian Directorate of Immigration (UDI)
- Statistics Norway (SSB)

Appendix A shows the number of statistics in the statistical programme for 2024–2027 by statistical domain and statistics producer.

1.4. Report structure

This report is based on information obtained using the methods and tools on the first floor of the quality house (Figure 1).

The primary source for forming a picture of the quality of official statistics is the quality evaluation conducted in autumn 2024. Chapter 2 provides a summary of the results, assessments and recommendations from the quality evaluation.

Other methods and tools for measuring and assessing quality are discussed in Chapter 3, including the status of the work on quality reviews, follow-up of the peer review, the quality of registry data, quality indicators and contact with users.

An important part of the quality work relating to official statistics is to identify areas where compliance with the quality requirements needs to be strengthened. Using the various methods and tools for measuring and assessing quality, areas where improvement is needed are identified and recommendations are given on how compliance with quality requirements can be improved. The statistics producers define improvement measures based on the recommendations. The status of improvement measures from previous quality evaluations and quality reviews is summarised in Chapter 4. Improvement measures following the European peer review and development measures in the statistical programme are also discussed in the same chapter.

The status of other processes and work in additional arenas for the follow-up of quality is discussed in Chapter 5. This covers the Committee for Official Statistics, networks, courses and various committees within Statistics Norway.

Chapter 6 provides a comprehensive overview of the prioritised areas of development for the quality system.

2. Quality evaluation of official statistics

2.1. Introduction

The objective of the quality evaluation is to obtain a basis for assessing compliance with the quality requirements in the Norwegian Statistics Act and the European Statistics Code of Practice. The quality evaluation covers all official statistics defined by the statistical programme. The quality evaluation consists of two parts: an initial self-assessment of compliance with the quality requirements, followed by Statistics Norway's quality team holding follow-up meetings with all the producers.

The quality evaluation has been conducted at statistical level for the second time. This means that a self-assessment has been carried out, in the form of a questionnaire, for all the approximately 350 statistics covered by the statistical programme. The questionnaires were primarily completed by those responsible for the statistics or others within-depth knowledge of the statistics and how they are produced.

The questionnaire included selected themes of relevance to the Norwegian context which can be answered at statistical level. The form contains around 35 questions based on the quality principles in the European Statistics Code of Practice. Certain questions were removed compared with last year's version, either because compliance is considered to be satisfactory or because the results were difficult to interpret in order to give an accurate picture of quality. Certain changes were also made to the wording of questions or answer options, and a number of new questions were also added. However, much of the questionnaire remains comparable with previous questionnaires, which makes it possible to measure trends in compliance with the quality requirements.

The questionnaire was designed to cover all types of statistics, but not all questions are relevant to all types of statistics. As a result, a number of questions have "Not relevant" as a possible answer.

With effect from 2024, there are five new producers of official statistics, who also received a questionnaire concerning compliance with quality requirements at institution level. These questionnaires were received by the other producers in 2021 and 2022.

Follow-up meetings were held with each external statistics producer and each statistical division within Statistics Norway. In most cases, the head of the divisions took part, along with selected statisticians or group leaders. The aim of these follow-up meetings is to quality-assure the responses from the self-assessment. The producers also provide information about the background for the responses, which is important in explaining the results of the questionnaire survey.

There is scope for subjective interpretation in the self-assessments, and there may also be questions that the person completing the form does not know the answer to. Although the responses undergo quality assurance, both through the head of division's possibility to review the responses prior to submission and in connection with the follow-up meetings, some uncertainty will still be associated with the responses.

Production processes for the statistics varied considerably in terms of focus, scope and complexity. The approximately 350 statistics are all given the same weighting in the results presented in this report.

The quality evaluation does not go into detail in the assessment of each statistic, and there is no assessment of individual statistics or producers in this report. The results of the quality evaluation are used at an aggregated level in order to assess the overall quality of all official statistics.

The results of the quality evaluation are shared with the statistical divisions within Statistics Norway and external statistics producers. They are able to view the results for their own statistics, but not those of others. This enables the statistics producers to use the results of the quality evaluation in their improvement work.

In addition to the self-assessments and follow-up meetings, information has been obtained from a number of other sources. Statistics Norway's statistics register provides information on timeliness, advance notification and punctuality for Statistics Norway's statistics. Another source used in this year's report is a survey conducted by Statistics Norway about the dissemination of statistics by producers. Through observations on the websites, an assessment has been made of the procedures established for the advance announcement of publication dates and the extent of metadata and user-oriented statistical documentation. An assessment has also been made of how easy it is to access the official statistics, both directly via the website and via the use of search engines. The survey was conducted using basic methods and provides a picture at an aggregated level of the challenges associated with the dissemination of official statistics in the Norwegian statistical system.

Results, assessments and recommendations from the quality evaluation are presented in the sub-chapters. The sub-chapters are organised according to the quality principles in the European Statistics Code of Practice. All 16 quality principles are discussed and assessed.

2.2. Institutional factors

Principle 1. Professional independence

Professional independence is covered by Section 5 of the Statistics Act and is the first quality principle in the European Statistics Code of Practice. Professional independence is partly safeguarded through the statistical authorities having managers with overall responsibility for ensuring that their official statistics are produced and disseminated in an independent manner. This theme applies at the institutional level. The Report on the quality of official statistics, 2023 (SSB 2019-2025) describes the status of professional independence for Statistics Norway and the ten other producers involved in the statistical programme. The five new producers from 2024 have been asked the same questions concerning professional independence within their institution.

Most of these five producers have a single manager with overall responsibility for official statistics, which helps to ensure that statistics can be produced in an independent manner from a statistical perspective. When asked whether official statistics are developed, produced and disseminated in a professionally independent manner, four of the five institutions responded "Yes", while one responded "Don't know".

It is important to establish and make visible the position of head of statistical production. Producers who do not have such a position in place are recommended to follow up on this matter.

Recommendations from previous quality reports which are still applicable:

- K01 (2022): Producers with no manager with overall responsibility for the production of statistics ensure that such a position is established and made visible on the producer's organisation chart.
- K38 (2023): Statistics Norway raises the topic of professional independence in the Committee for Official Statistics or the methodology network.

Principle 1 bis. Coordination and cooperation

No questions were asked concerning cooperation in the self-assessment in 2024. The recommendation from previous reports about engaging in cooperation that develops and promotes

innovation in statistics production remains unchanged. New producers should consider improvement measures within this area.

The producers take part in coordination and cooperation through the Committee for Official Statistics and the methodology network, which is discussed in Chapter 5.

Recommendations from previous quality reports which are still applicable:

- K2 (2022): Producers of official statistics engage in cooperation that develops and promotes innovation in statistics production.

Principle 2. Mandate for data collection and access to data

No questions were asked concerning the mandate for data collection in the self-assessments. The Statistics Act gives Statistics Norway a mandate to impose a duty to disclose information for statistical surveys. External producers of statistics often collect data for purposes other than the production of statistics and based on laws other than the Statistics Act. Recommendations from previous reports remain unchanged, and new producers should also consider improvement measures within this area.

Recommendations from previous quality reports which are still applicable:

- K16 (2022): Producers of official statistics who use data from administrative data systems (registers) should enter into agreements with data owners regarding the supply of data and cooperation on quality, for example according to a template from Statistics Norway.
- K22 (2022): Collect and share best practices in new technologies and new data sources among producers of official statistics.

Principle 3. Adequacy of resources

No questions were asked concerning resources in the self-assessments. This theme is discussed in the report for 2024 in Chapter 7.5. See also Chapter 6.1, which discusses the use of resources for the production of official statistics.

Principle 4. Commitment to quality

When asked whether the production of statistics is evaluated at regular intervals in order to identify areas for improvement, most producers responded "Yes" or "Yes, but there is room for improvement", which is about the same as last year. The proportion using the European Statistics Code of Practice to evaluate the production of statistics is just under three quarters, which represents a slight decrease. This indicates that the code of practice is not sufficiently well-known or is not being sufficiently actively used.

When asked whether quality indicators are used to assess the production process and product quality, nearly three quarters responded "No", including four of the new producers. This is slightly more than indicated by the previous quality evaluation and confirms the impression that the use of quality indicators is not widespread. Among those who do use indicators, just over three quarters use recommended indicators from "Recommended Quality Indicators in Official Statistics" (SSB 2019-2025). Quality indicators are discussed in more detail in Chapter 3.4.

The five new producers were asked whether they have a quality manager or group with special responsibility for assessing compliance with the quality requirements. Three responded "Yes" and two responded "No". This indicates that many of the new producers should also strengthen their commitment to quality and enhance their competence regarding the quality requirements.

Recommendations from previous quality reports which are still applicable:

- K37 (2023): All producers of official statistics are encouraged to participate in networks, courses, seminars and meetings on quality in statistics held by Statistics Norway or others.
- K39 (2023): The issue of assigning responsibility for quality assurance work is discussed in the Committee for Official Statistics.
- K42 (2023): All the producers of official statistics initiate work on assessing relevant quality indicators for selected statistics.
- K64 (2024): Standardise log data structures to facilitate the establishment of quality indicators.

Principle 5. Statistical confidentiality and data protection

It is extremely important to safeguard statistical confidentiality in the publication of statistics, so that the population trust the producers of official statistics to safeguard personal privacy. Section 7 of the Statistics Act refers to statistical confidentiality in official statistics as follows:

Section 7. Statistical confidentiality in dissemination of official statistics

(1) Official statistics shall be disseminated in such a manner that it is not possible to directly or indirectly identify a statistical unit and thus disclose individual data.

(2) The first subsection shall not apply when the exception follows from an obligation to produce statistics pursuant to the EEA Agreement.

(3) An exception may be made from the first subsection if the statistical unit is a public authority, and the interests of the public sector are protected. An exception may also be made from the first subsection if the statistical unit has granted consent or if the data are available to the public.

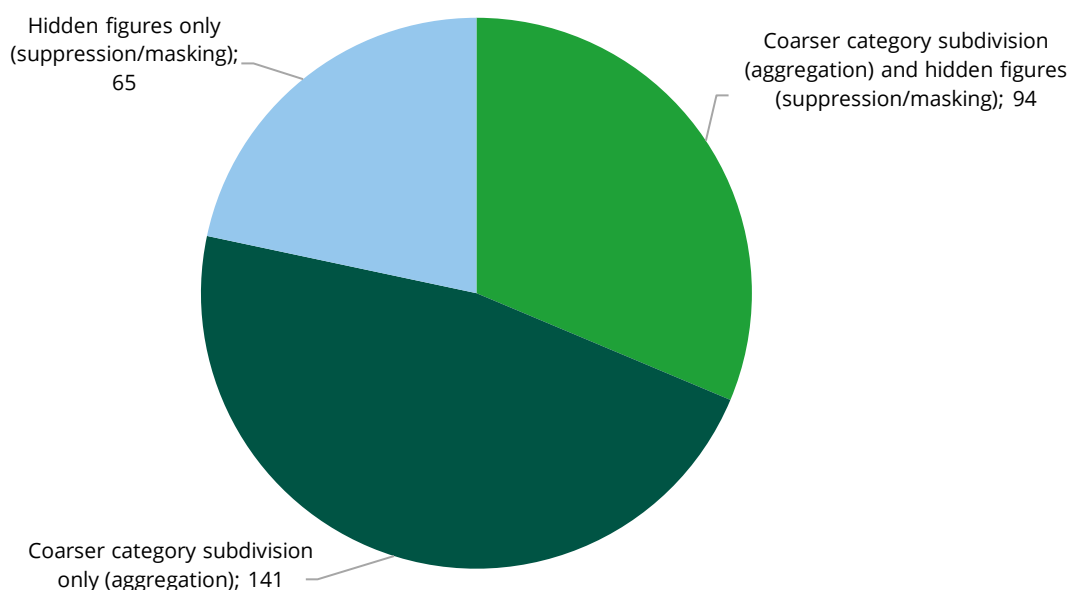
There are a number of ways of safeguarding confidentiality in statistics that are to be published. In official statistics, the most frequently used methods are to aggregate data, i.e. to group variables, or to merge categories to avoid publishing something that could be identifying. It is also possible to hide table cells if they contain few units or if a few units alone account for almost the entire contribution to the cell. Hiding figures for confidentiality reasons is referred to as the "suppression", "masking" or "primary suppression" of cells. In the case of publication, the values of hidden cells will be replaced by a symbol (typically a colon). When this method is used in tables that contain totals/sums, it must be ensured that it is not possible to use the total to recalculate the hidden figures. To achieve this, it is necessary in some cases to hide individual cells not normally worthy of protection. This process is known as secondary suppression. An alternative to cell suppression is to round off or add noise to the cell values in order to safeguard confidentiality.

The quality evaluation shows that the producers of official statistics attempt to safeguard confidentiality by using recognised and quality-assured programs or programs which they have coded themselves, or by manually attempting to protect data through aggregation, rounding or suppression. Statistics Norway's Confidentiality Committee has adopted a rule which stipulates that manual rounding or suppression must not be performed on Statistics Norway's statistics. This is because there is a substantial risk that the manual protection of data or the use of code produced by statisticians themselves will not capture all the possibilities for the disclosure of information concerning individual units. There is also a risk that using this procedure will suppress a lot of information or round off too much, which could impact the relevance of the statistics. Even if recognised software is used to safeguard confidentiality, it is important to possess expertise in the area and the software used.

The quality evaluation shows that recognised methods or programs for safeguarding confidentiality are used for just 9 per cent of official statistics. For 24 per cent of the statistics, self-written code is used, while manual suppression is performed for 14 per cent of the statistics.

To safeguard statistical confidentiality in official statistics, data grouping is most often used. Aggregation to form larger groups is performed for around 69 per cent of all the official statistics to prevent the disclosure of individual units. Suppression is used for 46 per cent of the statistics, while 22 per cent use both grouping and suppression. The addition of noise or rounding is only used as a method for a few statistics (4 per cent).

Figure 2.1 How is statistical confidentiality safeguarded for the 300 statistics that aggregate and/or hide figures?



Source: Statistics Norway

The results of the quality evaluation show that 36 official statistics are covered by exemptions from the requirements of the Statistics Act regarding confidentiality, including eight statistics produced by parties other than Statistics Norway (cf. Section 7 (2) and (3) of the Statistics Act).

For 72 per cent of the statistics, respondents stated that their institution has a clear and consistent interpretation of confidentiality that is both practical and applicable. For 16 per cent, the response to this question was "No", while for 13 per cent of the statistics, the responsible producers responded that the question was not relevant.

The five new producers answered a number of additional questions concerning statistical confidentiality. Three of these have procedures which have not been documented in writing, while four responded that they do not have internal training concerning statistical confidentiality.

When asked whether confidentiality may not have been adequately safeguarded in publications or customised tables, 7 per cent responded "Yes", while 15 per cent responded "Don't know". For around 78 per cent of the statistics, the response was that confidentiality had been adequately safeguarded.

For the statistics produced by Statistics Norway, it is mainly the Division for Microdata within Statistics Norway or the Norwegian Agency for Shared Services in Education and Research (SIKT) that

manages researchers' access to data. A review of confidentiality in Statistics Norway's supply of microdata is currently under way.

For the other producers of official statistics, it is most common to share data at unit level directly with researchers. The quality evaluation showed that data from 38 of the statistics produced by the other producers are shared with researchers. For two statistics, data is supplied to SIKT, while for 11 statistics, data is sent to Eurostat.

Data protection was one of the topics in the self-assessments that the producers responded to at the institution level in 2021 and 2022. The five new producers were asked questions about confidentiality agreements, access to data and logging of traffic to identify unauthorised access. The new producers largely either have these measures in place, are in the process of establishing solutions, or have data that is publicly available.

Recommendations from previous quality reports which are still applicable:

- K05 (2022): That Statistics Norway develops courses on statistical confidentiality for all producers of official statistics.
- K06 (2022): Establish a procedure for external parties who carry out commissioned assignments for producers of official statistics to sign a confidentiality agreement.
- K59 (2024): Establish and improve guidelines for disclosure control and raise awareness of these with statistics producers.
- K61 (2024): Offer training in statistical confidentiality to everyone and make it compulsory for all new employees involved in statistics production and relevant support functions.

New recommendations 2025:

- K65¹(2025): Work to replace manual suppression and noise addition, and the use of own software for disclosure control, using recognised methods and software.
- K66 (2025): Finish the review of confidentiality in Statistics Norway's deliveries of microdata and follow up on the results of this.

Principle 6. Impartiality and objectivity

For most statistics, only those involved in the production process have access to the results before they are published. Where someone not involved in the process does have such access, this is often due to their cooperation with other authorities on data quality and accuracy control. In some of these cases, the cooperation is not disclosed when the statistics are published, or it is uncertain whether it is disclosed. It is important that such exceptions and the justification for the exceptions are made known to users of the statistics.

With few exceptions, serious errors discovered in published statistics are corrected as quickly as possible, and corrections of published statistics are announced. Announcing planned revisions is relevant for well over half of the statistics. However, just under two thirds of these respond that they announce the revision in advance.

Around half of the statistics supply tailor-made statistics on demand. Such analyses should be made available to everyone, to ensure equal access to information. Three quarters of those who supply such analyses make the results available on their website or in a public record. The remaining should ensure that results are made publicly available.

To ensure that everyone has equal and simultaneous access to published statistics, it is important to announce the date and time of publication in advance. Statistics Norway has decided that the

¹ Replaces recommendation K60 (2024): Adopt recognised software to ensure adequate statistical confidentiality.

publication of statistics will be announced in the statistics calendar on ssb.no at least three months prior to publication. The proportion of statistics where publications are announced after the three-month deadline increased from 8.5 per cent in 2020 to 13 per cent in 2024.

The results from the quality evaluation and the review of the dissemination of statistics show that some producers can improve publicly available information regarding when statistics will be published (advance notification), changes to scheduled publication times and correction of errors.

Recommendations from previous quality reports which are still applicable:

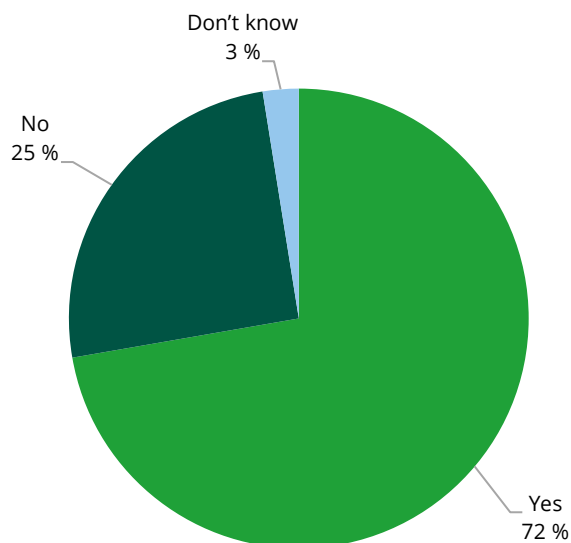
- K08 (2022): All producers should have written guidelines for impartiality and objectivity in the production and presentation of statistics, and publish them on their website. They can refer to or reuse guidelines available on ssb.no.
- K11 (2022): All producers should announce the date and time for the release of statistics at least three months in advance and adhere to the announced date and time for all users.
- K12 (2022): All producers should announce corrections to published statistics.
- K15 (2022): When someone outside the statistics production team has access to statistical output prior to publication, this deviation must be justified and made known to users in connection with publication.
- K29 (2022): All producers should draw up written guidelines for publishing statistics.
- K33 (2022): Customised analyses that may be relevant to the general public should be published on the producer's website or in a public record.

2.3. Statistical processes

Principle 7. Sound methodology, Principle 8. Appropriate statistical procedures, and Principle 9. Non-excessive burden on recipients

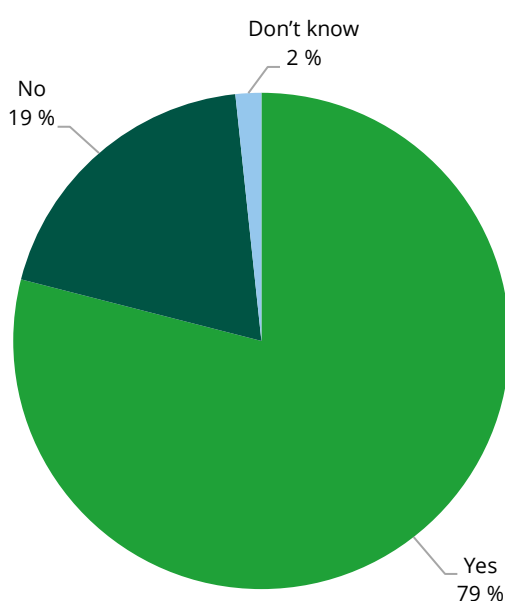
In Norway, a high proportion of official statistics is based on data from administrative information systems or extracts obtained directly from IT systems. Just over one third of the statistics are based on data collected using questionnaires. The European Statistics Code of Practice, indicator 8.2, states that "In the case of statistical surveys, questionnaires are systematically tested prior to the data collection". Testing of forms is important to ensure that the wording of questionnaires and possible answers are understood by those completing the questionnaires. This will help to optimise the quality of input from questionnaire surveys. The results of the quality evaluation show that the questionnaires are tested for around 75 per cent of the statistics. This is on a par with the results from last year. The impression from the follow-up meetings is that the producers of statistics are aware of testing and that they will carry out testing in connection with the next major revision of the forms. A comprehensive process is under way within Statistics Norway to transfer forms from Altinn2 to Altinn3, while in the slightly longer term, it will also be relevant to transfer forms from the Kostra² solution to Altinn3. Consequently, major changes will be made to the forms for many statistics over the coming years, and this indicator is therefore very relevant.

² KOSTRA: A Norwegian abbreviation for 'kommune-stat-rapportering' (municipality-state-reporting). Through KOSTRA, all Norwegian municipalities and county authorities send figures from their service areas to Statistics Norway.

Figure 2.2 Do you test the forms on potential respondents before they are used, or in the event of major changes?

Source: Statistics Norway

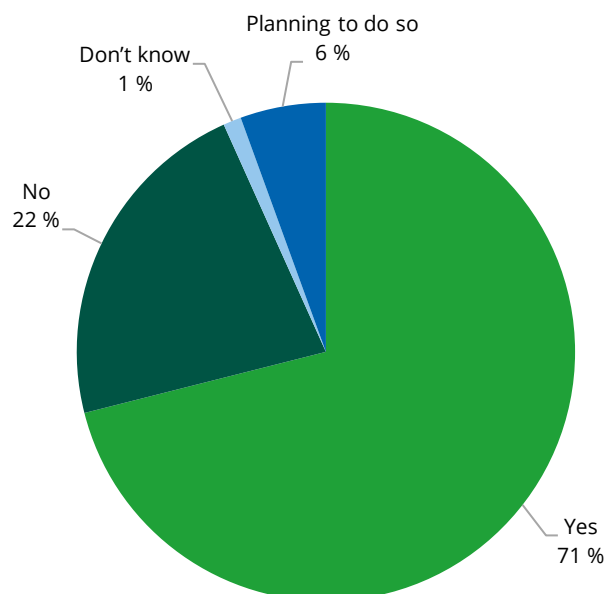
Assessing alternatives to questionnaire surveys is important for a number of reasons. It can reduce the response burden, streamline the data collection and improve the accuracy of the input. For the statistics producers, it is important to be continually aware of alternative data sources with regard to improvements. For statistics based on questionnaire surveys, just under 80 per cent responded that they have considered collecting data in other ways. This represents a small increase compared with last year. The impression gained from the follow-up meetings is that such assessments are carried out at regular intervals. In practice, however, it is rare for such assessments to lead to a questionnaire survey being entirely replaced by an alternative data source. It is more common for alternative data sources to be used as a supplement to questionnaire surveys to help improve various quality aspects of the statistics, such as accuracy and comparability.

Figure 2.3 Have you considered collecting data in a different way in order to improve accuracy, reduce the response burden or streamline data collection?

Source: Statistics Norway

Statistics producers should periodically assess whether all the information being collected is necessary. This is important for the principle of data minimisation, which entails limiting the amount of personal information that is collected and processed. Producers of official statistics should only collect what is necessary for the intended purpose of the statistics. The results of the quality evaluation show that, for around 70 per cent of the statistics, occasional assessments are made of whether all the information collected is needed. This is roughly on a par with last year.

Figure 2.4 Do you occasionally assess whether all the information you collect is necessary?



Source: Statistics Norway

When asked whether there is written documentation describing how the statistics are produced, almost all respondents answered “Yes” or “Yes, but there is room for improvement”. The question refers to documentation which explains the steps involved in the production of statistics for those who produce the statistics. The proportion that responded “Yes, but there is room for improvement” fell from around 54 per cent to approximately 46 per cent compared with last year. This represents a marked improvement.

Statistics Norway publishes user-oriented documentation for all its statistics, under “About the statistics” at ssb.no. When asked whether they consider updating documentation or “About the statistics” in connection with each publication of statistics, less than 20 per cent of the producers in Statistics Norway responded “No” or “Don’t know”. External producers were asked whether documentation of how the statistics are produced is available from their website. The proportion which has such documentation is just above 70 per cent. This represents a slight increase compared with last year.

The review of the dissemination of statistics shows considerable variation between the producers of official statistics as regards user-oriented documentation (“About the statistics”) on the statistics page. There are, in some respects, major deficiencies and a lack of common structure in the user-oriented documentation. The structure of the user documentation should be standardised across the producers. It would be logical to use Statistics Norway’s templates and guidelines for “About the statistics” as a starting point, these being largely based on SIMS (Eurostat, 2015), which is Eurostat’s standard for statistical documentation. Standardisation is important from a user perspective. With standardisation, all users will be able to find the same, supplementary user documentation for all official statistics, regardless of who produced the statistics. Standardisation would also facilitate the

establishment of common solutions for statistical documentation, which is discussed in more detail in Chapter 6.2.

Recommendations from previous quality reports which are still applicable:

- K14 (2022): We recommend that producers familiarise themselves with the principles of revision developed by Statistics Norway and make them known to their users, for example by referring to Statistics Norway's website.
- K17 (2022): Ensure that user testing of questionnaires is carried out systematically.
- K19 (2022): Prepare written guidelines for how the production of statistics should be carried out.
- K21 (2022): Where applicable, discontinue data capture by e-mail and replace it with a secure solution, such as file transfer.
- K52 (2024): Establish guidelines and build expertise in retrieving data directly from the IT systems of respondents or other data providers. One such example is machine-to-machine (M2M) communication.
- K63 (2024): Consider whether the quality reports can be further developed to better track quality over time and more easily adapt the report template as new needs arise.

New recommendations 2025:

- K67³ (2025): All producers are recommended to adapt the user-oriented documentation of their statistics to Statistics Norway's template and guidelines for "About the statistics" and make this available on the statistics' website.
- K68 (2025): All producers are recommended to establish procedures and practices for assessing the updating of user-oriented documentation in connection with each publication.

Principle 10. Cost-effectiveness

In some statistical domains, substantial resources are allocated to editing. 'Editing' means the control, investigation and alteration of data in order to improve the accuracy of the statistics. It is important to know what effect the resources used for editing have on the end result. This may also indicate whether it is possible to save resources and/or publish the statistics more quickly. It is therefore recommended that the effects of editing are measured, for example by comparing statistical output that is to be published with and without editing. For just over three quarters of the statistics, data is edited during the production process. Among those who edit data, just under 60 per cent do not measure the effect of editing, which is slightly lower than last year. Relatively few of those who measure the effect use the indicator discussed in the document on recommended quality indicators in official statistics.

Statistics Norway has published a document on principles and guidelines for data editing. More than 80 per cent of those who edit data are familiar with these principles.

Statistics Norway is currently carrying out a comprehensive process of transferring statistics production to a new cloud-based data platform (Dapla). Dapla will help to streamline tasks and production processes, ensure the efficient storage and retrieval of data and metadata, and support the sharing of data across statistical domains. During the quality evaluation, respondents were asked whether the transition to Dapla has led to improvements in Statistics Norway's statistics. The questions were only asked regarding the statistics that had been transferred to the new data platform by autumn 2024. This applied to just over 30 statistics. The transfer has resulted in improvements for around two thirds of these statistics. The key message was that the production process has become simpler and clearer, giving statisticians better control over the production.

³ This recommendation replaces three previous recommendations: K09. All producers should prepare written documentation on how the statistics are produced and keep the documentation up to date, K10. Documentation of the statistical production is published on the statistical authority's website, and K45. All producers are recommended to document statistics in line with SIMS, following Eurostat's recommendations.

Some respondents also noted that the statistics production has become faster and more automatic than previously. As regards the producers of statistics who responded "No" or "Don't know" when asked whether there had been any improvements, this is explained by the view that the quality was already good. During the follow-up meetings with the statistical divisions, it also emerged that there is considerable pressure to transfer statistics to the new data platform and that there is little time to implement improvements in connection with the transition. There is therefore a risk that weaknesses in the old production processes will be reproduced in Dapla. During the meetings with the divisions, it was also explained that improvements to the existing production processes are put on hold until they have been transferred to the new data platform, rather than being implemented continuously, as would have been done without the impending transition.

Recommendations from previous quality reports which are still applicable:

- K36 (2022): Statistics Norway should compile a collection of best practices with guidelines and make it available to the Committee for Official Statistics.
- K58 (2024): Measure the effect of editing and assess whether the editing work can be reduced and/or concluded earlier, or if it is possible to improve the quality of input data. See quality indicator number 4 in the report on recommended quality indicators in official statistics (in Norwegian only, Notater 2024/5).

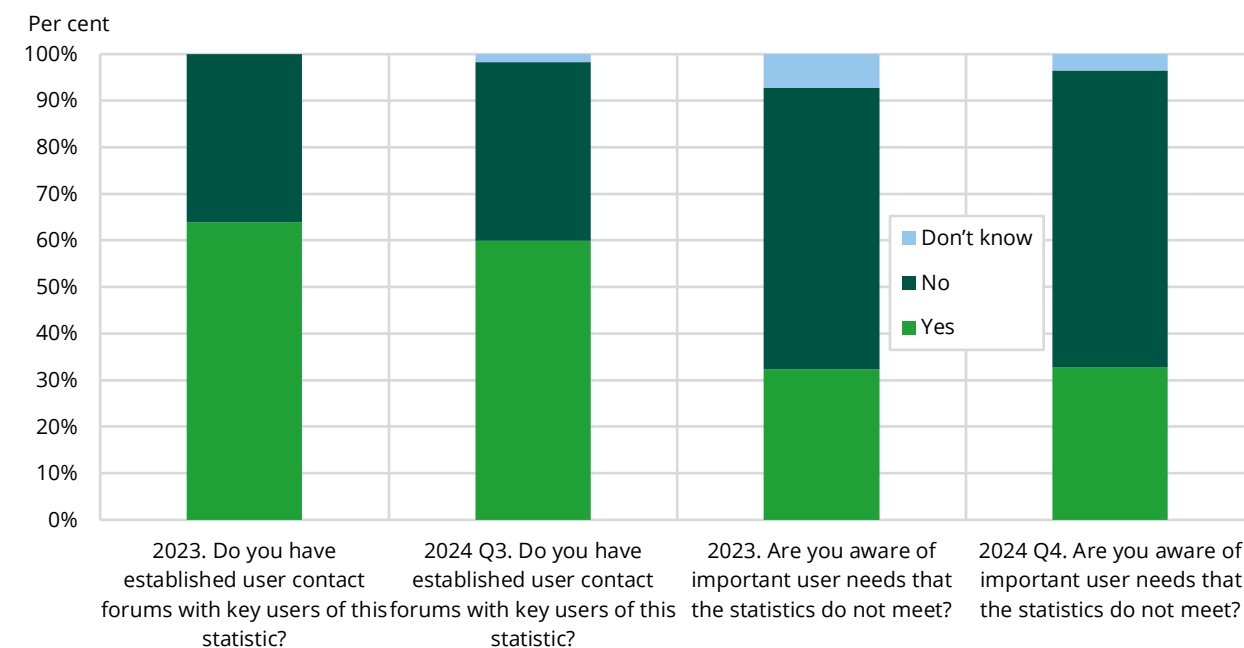
New recommendations 2025:

- K69: Producers are recommended to familiarise themselves with Statistics Norway's principles for editing.
- K70: It is recommended that Statistics Norway monitor developments in the quality of statistics in connection with the transition to Dapla.

2.4. Statistical products**Principle 11. Relevance**

User contact forums have been established for approximately 60 per cent of the statistics. This represents a decrease from 2023, when such forums had been established for approximately two thirds. However, it is not certain that this is a real decrease, as the responses may be due to different interpretations of the questions.

As per last year, around a third responded that they were unaware of any unmet user needs. Not all needs can be met, and the value of meeting a user need must be weighed against the costs that it will entail in each case.

Figure 2.5 Relevance 2023 and 2024

Source: Statistics Norway

Recommendations from previous quality reports which are still applicable:

- K23 (2022): Producers who do not have established forums for contact with users should consider establishing user councils or something similar. Conducting a user and stakeholder analysis can be a useful tool in this work.
- K43 (2023): Producers should conduct regular surveys to measure user satisfaction with the statistics.
- K44 (2023): Producers should introduce a feedback function for the statistics on their websites.
- K49 (2024): It is recommended that enquiries about user needs received by the central support team be summarised and communicated to those responsible for the statistics.

Principle 12. Accuracy and reliability

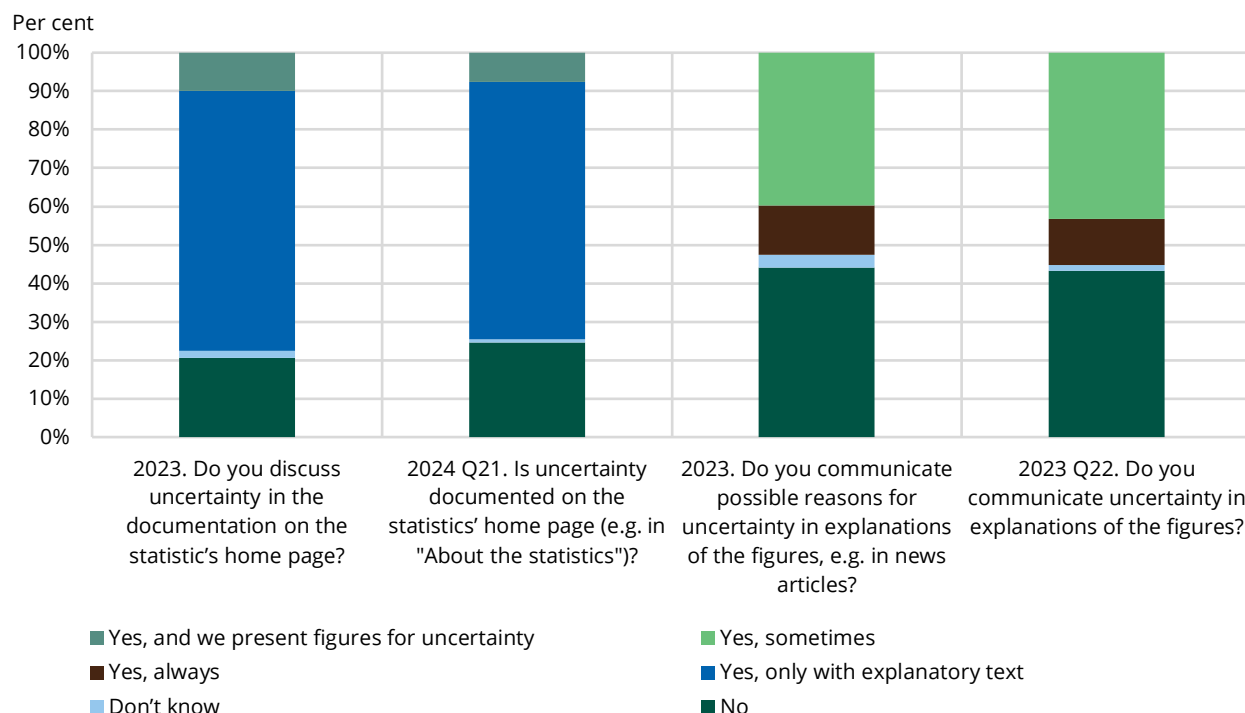
Statistics should reflect reality, and it is important to be aware of uncertainties in the data analysis and in the communication of findings. Results and the degree of uncertainty must be presented in a factual manner.

For one third of the statistics, quantitative targets are calculated for one or more forms of uncertainty. For half of the statistics, this is done even though it would not have been relevant, while for the remaining statistics, it is not relevant.

The producers were asked whether they assess uncertainty qualitatively, without quantifying specific measurements. Uncertainty is calculated for two thirds of the statistics. It is not assessed for one in five statistics, while the rest indicated that it was not relevant. The sources of uncertainty that are most frequently assessed are processing errors, measurement errors and coverage errors.

For three quarters of the statistics, a description of uncertainty is included in explanatory text on the home pages. This is on a par with the previous report. One tenth of these describe uncertainty numerically, while the rest use explanatory text.

During the follow-up meetings, several respondents noted that they will consider performing more calculations and assessments, and publish them.

Figure 2.6 Communicating uncertainty 2023 and 2024

Source: Statistics Norway

Recommendations from previous quality reports which are still applicable:

- K55 (2024): Explain uncertainty and potential sources of error on the statistics' home page.
- K56 (2024): Where uncertainty is already calculated for statistics, consideration should be given to publishing this on the statistics' home page.
- K57 (2024): Raising awareness and enhancing competence in understanding, calculating and communicating statistical uncertainty.

New recommendations 2025:

- K71: Expand Statistics Norway's methodology library through the addition of more methods for calculating uncertainty.

Principle 13. Timeliness and punctuality

Timeliness for Statistics Norway's statistics is obtained from Statistics Norway's statistics register, while for other producers of official statistics, it is obtained from the responses to the self-evaluation.

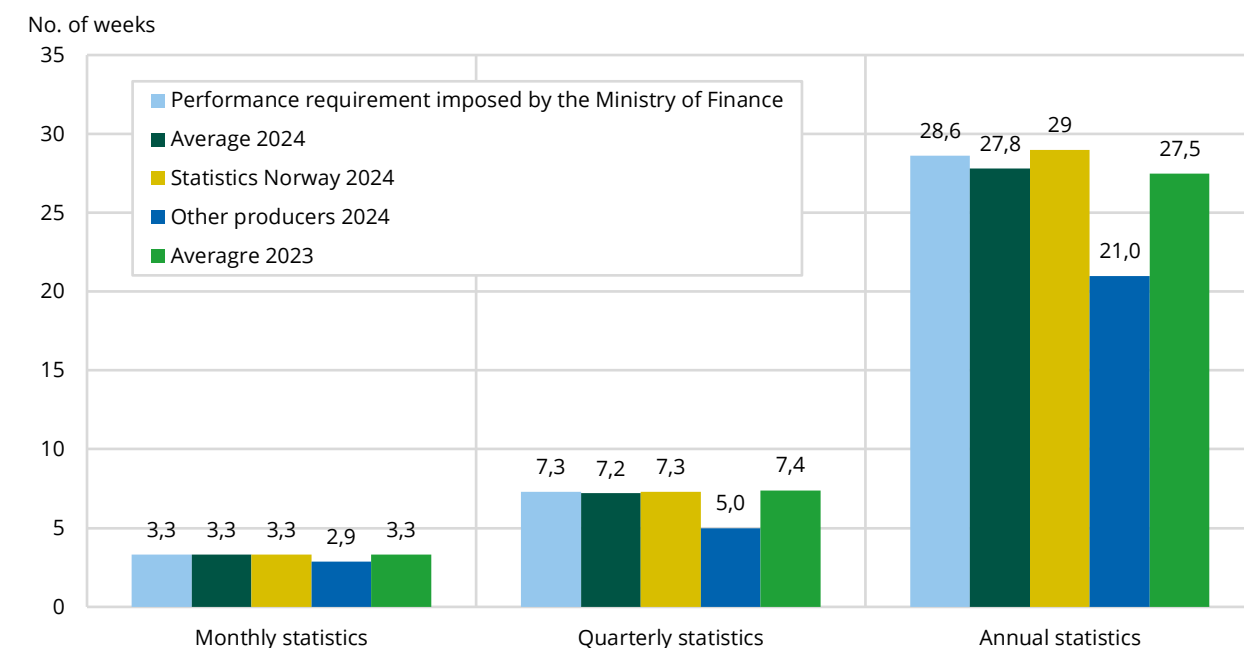
The timeliness indicator shows the number of weeks from the end of the reference period until the publication of the statistics. If publication takes place during the reference period, timeliness will be calculated as the time from the conclusion of data capture until publication. The results for monthly, quarterly and annual statistics are averages that include both preliminary and final figures.

There have been minor changes in timeliness for Statistics Norway compared with 2023. For the monthly and quarterly statistics, timeliness is within the performance requirement imposed by the Ministry of Finance, while it is somewhat above the requirement for the annual statistics. One new annual statistic has very low timeliness, which affects the average for the whole of Statistics Norway, with the result that timeliness is somewhat worse than in 2023 (as shown in Figure 2.7). If this statistic is disregarded, there is an improvement in timeliness from 2023.

In 2024, the average timeliness for the statistics for the other producers again fell within the timeliness requirements imposed on Statistics Norway by the Ministry of Finance. There is some improvement for the monthly and quarterly statistics in relation to 2023 and some deterioration as regards annual statistics, but the changes are small.

When asked whether the timeliness meets users' requirements and demand, 80 per cent responded "Yes".

Figure 2.7 Timeliness in official statistics, 2023 and 2024



Source: Statistics Norway

Punctuality is about statistics being published on the pre-announced date. Figures for this are only available for Statistics Norway, and these have been obtained from the statistics register. In 2024, punctuality was 96 per cent. Punctuality has remained at around this level for many years, although it was lower during the COVID-19 pandemic. It is recommended that Statistics Norway monitor punctuality levels and implement improvement measures if it decreases. The most common reasons for deviations are technical challenges, problems with data deliveries and statistics being ready for publication earlier than announced. Publishing statistics before the pre-announced date can be problematic, particularly with regard to the equal treatment of users. This is particularly important for market-/stock exchange-sensitive statistics and critical statistical domains of major importance to society. There must be compelling reasons for publishing before the pre-announced date. A good practice would therefore be to publish as announced and pre-announce an earlier date for the next publication of statistics at the same time.

Recommendations from previous quality reports which are still applicable:

- K25 (2022): Producers should review the process for publishing preliminary statistics for all official statistics. The review should aim to establish common guidelines for all official statistics.
- K26 (2022): Some producers should analyse the difference between preliminary and final statistics. Based on the analysis, the need for preliminary statistics can be evaluated.
- K41 (2023): All producers adopt Statistics Norway's timeliness indicator: the number of days between the end of the statistics' reference period and publication of the statistics.
- K47 (2024): A review of the reference period is needed for all statistics in accordance with the revised definition.

- K48 (2024): For the KOSTRA statistics in Statistics Norway, it is recommended that an assessment is made of whether timeliness can be improved by allowing certain statistics to be published earlier or more frequently, based on a balance between timeliness and other quality objectives.

New recommendations 2025:

- K72: Statistics Norway's management regularly follows up on the indicator for punctuality.
- K73: Arrange a seminar with the theme of punctuality and timeliness for all producers of official statistics.

Principle 14. Coherence and comparability

Coherence and comparability are about the statistics being consistent over time and comparable across regions and countries.

The question of whether statistics are comparable over a reasonable period of time was first asked in the 2024 quality evaluation. When asked this question, 98 per cent responded "Yes".

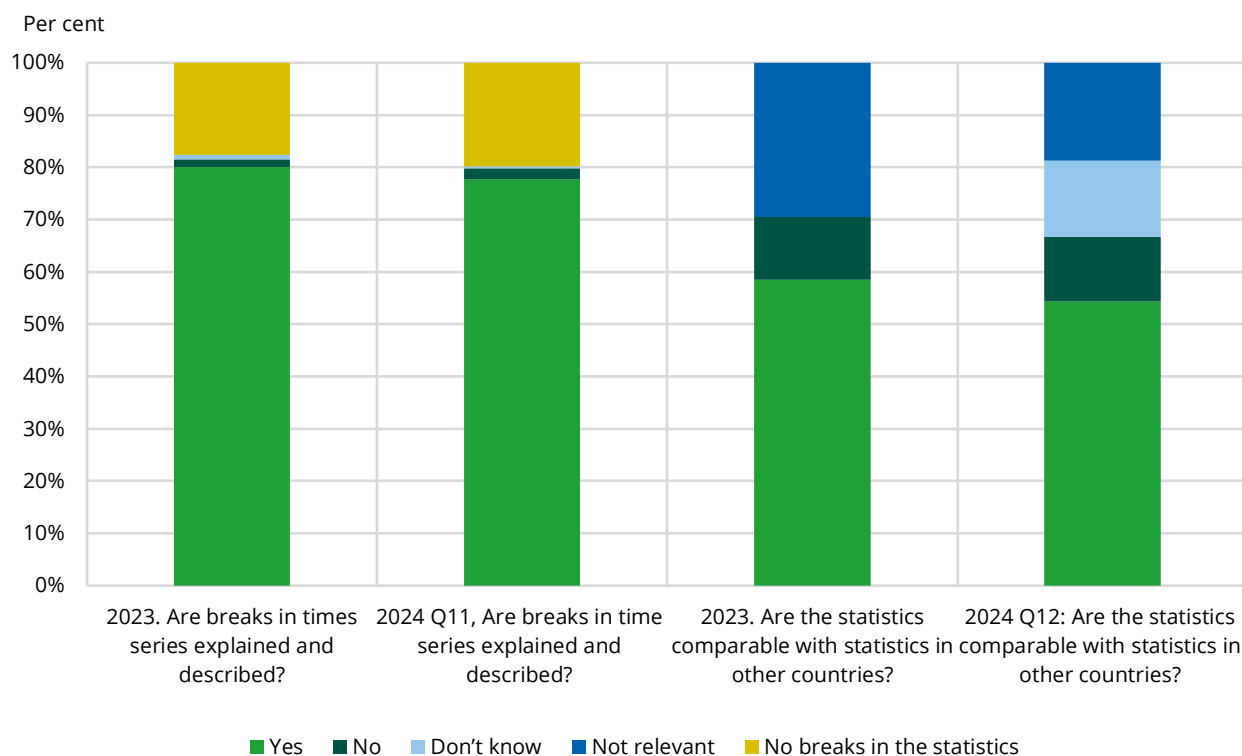
As regards the question concerning breaks in time series, there were minor changes from 2023 to 2024. Approximately 80 per cent responded that breaks in time series are discussed and explained to users. Around 20 per cent responded that they did not have any breaks in time series in either 2023 or 2024.

As regards the question of whether the statistics are comparable with statistics from other countries, there are no major differences between 2023 and 2024. Among the respondents, 58 and 54 per cent respectively responded "Yes" to this question. Part of the difference between the two years is probably due to "Don't know" being added as a possible answer in 2024.

When asked whether the statistics use national or international classifications, around 80 per cent responded "Yes" in both years.

The quality evaluation examines the use of Klass⁴, as this is a tool for promoting comparability between coding systems, and therefore statistics. Around 75 per cent of the statistics used classifications or code lists in Klass in both 2023 and 2024.

⁴ Klass is Statistics Norway's documentation system for coding systems (classifications and code lists). Klass is described at ssb.no: <https://www.ssb.no/en/metadata/om-klass>

Figure 2.8 Time series and comparability. Question 12: The possible answer "Don't know" was not included in 2023

Source: Statistics Norway

Recommendations from previous quality reports which are still applicable:

- K28 (2022): Producers whose statistics include variables that are not comparable with corresponding variables in other Norwegian statistics or who are unsure whether they are comparable with similar statistics in other countries, should investigate whether they can improve comparability, or possibly explain to users why comparison is difficult.
- K53 (2024): Statistics Norway: consider opening up the Klass coding system so that external producers of statistics can input their coding systems and classifications.
- K54 (2024): Klass should be adopted where practical and appropriate.

Principle 15. Accessibility and clarity

Statistics should be presented in a way that is accessible to all types of users and easy to understand. Metadata and documentation of how the statistics were produced must also be available to users.

The results of quality evaluations and reviews of the dissemination of statistics by external producers indicate considerable variation in the dissemination of official statistics. It is important that producers follow up on this in their quality work going forward. Statistics Norway's statistical releases on ssb.no have been standardised, and the established procedures are largely in accordance with the quality principles. The other producers have various ways of disseminating statistics. Some of the statistics are difficult to find, both from search engines and from the producers' home pages. Around half of the producers facilitate downloading of the statistics. The most common formats are Excel (xlsx) and text files (csv). A couple of producers offer an API solution. Few producers release statistics in English. Some have headings or sections in English, but the actual statistics are in Norwegian only.

Half of the statistical publications include visual presentations such as figures, graphs or maps, which represents a slight increase from 2023. For 30 per cent of the statistics, the producers

responded that they do include visualisations, but there is room for improvement. Overall, around 20 per cent of the statistics are published without visual aids. During the follow-up meetings, a number of producers indicated that they would like to see more opportunities for publishing visualisations, as well as clearer recommendations and guidelines for illustrations. The results of the quality evaluation also show that official statistics are often published along with a news article. Almost 60 per cent of the statistics are always accompanied by an article upon publication, while 30 per cent of statistics are sometimes accompanied by an article. This is approximately the same result as in 2023.

Recommendations from previous quality reports which are still applicable:

- K18 (2022): Consider offering training courses in using plain language.
- K20 (2022): Guidelines for how statistics should be produced are published on the statistics authorities' websites, or links are provided to guidelines on ssb.no.
- K30 (2022): All producers must ensure that the guidelines for publishing statistics are accessible on their websites. These may be guidelines drawn up by the producers themselves or the principles in the European Statistics Code of Practice, available on ssb.no.
- K50 (2024): Improve the dissemination platforms and the tools for creating visual presentations to make it easier to publish different types of visualisations.
- K51 (2024): Use different types of visualisations.

New recommendations 2025:

- K74: Producers should make official statistics visible to users and ensure that they are easy to find both by using search engines and on their website.

3. Other tools and methods for assessing and measuring quality

3.1. Register quality in Statistics Norway's statistics

Background

Statistics Norway has had a formal cooperation with the owners of administrative information systems since 2012. Agreements between Statistics Norway and data owners regulate the annual data deliveries, the frequency of meetings at management level and the provision of structured feedback on the quality of the data that Statistics Norway receives from the data owners (quality reports).

The aim of the cooperation is to improve the quality of administrative information systems that serve as data sources for official statistics.

Status

A total of 26 agreements have been signed, and they have all been established or renewed since the current Statistics Act entered into force in its entirety from 2021. Work is under way to clarify whether three additional agreements established under the old Statistics Act should be renewed. In addition, it has been confirmed that one agreement will not be renewed, as Statistics Norway no longer collects the data.

The agreements encompass around 200 different data deliveries to Statistics Norway with varying frequency, ranging from daily streamed data to monthly, quarterly or annual data deliveries. For most of the agreements, data deliveries are requested in the autumn before the year of delivery, but there is considerable variation in the consistency with which these agreements are followed up by the responsible division in Statistics Norway. Under the agreement, Statistics Norway is responsible for producing in excess of 100 quality reports annually. The actual number of quality reports produced is somewhat lower, primarily due to capacity constraints. In 2024, 90 quality reports were produced. The quality reports assess aspects related to the transfer of data and the quality of units and values, and may include suggestions for measures to improve quality and strengthen the cooperation.

In addition to the quality reports, numerical quality indicators are also developed for around 10 per cent of the data deliveries. Both the quality reports and the numerical quality indicators provide feedback on invalid, missing, suspicious or inconsistent values, or instances of missing units, duplicate units or units that should have been deleted. The numerical quality indicators quantify the number of observations with missing values or highlight other anomalies. Feedback is not provided in a format that could influence the data owner's processing of individual units.

The quality reports are designed to provide textual assessments and feedback on the quality of the individual administrative data source, but they are not particularly well-suited for examining the development of quality over time. The format of the quality reports is also not conducive to efficient collation and aggregation across the different data sources. Work is therefore under way to determine how the quality reports can be further developed in order to better meet more needs.

Other non-standardised documents can also be drawn up and exchanged with data owners in connection with the work on quality. Regular follow-up meetings are held between Statistics Norway and the data owners. Annual top-level meetings are held with the largest data owners.

The experience gained from the structured cooperation on quality has been positive. One consequence of the cooperation agreements is increased attention to quality among the data owners.

Assessments

The quality of data from administrative information systems is considered to be very good, and these data sources are highly valued in the production of statistics. Using data from such systems also helps to maintain a low overall response burden on society. The cooperation agreements give Statistics Norway and the data owners a good overview of annual data deliveries, updated contact points and thus better predictability and a better basis for cooperation on improving quality.

Below follows a summary of the findings in the quality reports for 2024.

Delayed or missing data deliveries

Data is generally received at the agreed time and in accordance with the agreed specification. In 2024, there were a few cases where data deliveries were delayed or had major shortcomings. In one case, Statistics Norway never received updated data for use in the statistics.

Assessments of quality in terms of units

In most cases, "unit" refers to an individual or business.

The identifiability of units is generally good. This means that units can be unambiguously identified automatically in the system from an identification number, such as individuals with a personal identification number and businesses with an organisation number. Good identifiability is, among other things, essential for efficiently linking multiple data sources and producing statistics with pseudonymous identification numbers. However, there are some instances where the system is unable to identify units. This is often due to missing personal identification numbers for foreign nationals.

Some quality reports highlight challenges related to undercoverage, which is when units that should have been included in the data source are missing. Duplicates are also sometimes identified in the data sources. In one case, the undercoverage of units prevented the statistics from being published.

Assessments of quality in terms of value

Values are understood as information relating to the units. These can be numerical values, attributes or data states.

In general, feedback is more often received about challenges with values than with units. Measurement errors, inconsistencies and suspicious values are reported. Most feedback relates to missing values. In one case, errors in data resulted in published statistics having to be corrected, while in another case, missing values prevented publication of certain parts of the statistics.

Suggestions given to data owners for improving quality

In the case of more than half of the quality reports, Statistics Norway suggests collaborative measures for improving the quality, reducing the response burden, or further developing the data source. In several areas, it is emphasised that a strong and close cooperation with frequent meetings and strong lines of communication is essential for improving the quality of administrative data. Non-conformities or problems in deliveries are mostly resolved through dialogue between the data owner and Statistics Norway.

Recommendations

Despite the positive experiences with Statistics Norway's system and good feedback from the peer review in 2021, there is still room for improvement. In some cases, Statistics Norway can provide closer follow-up of agreements and data owners, and there is also room for improvement in the completion and submission of quality reports.

New recommendations 2025:

- K75: Statistics Norway should ensure that relevant employees are familiar with obligations and tasks in the cooperation with register owners and ensure active follow-up of the agreements.

3.2. Peer review

As members of the European Statistical System, Statistics Norway and four producers of Norwegian official statistics were subject to an external peer review during the period 2021–2023. The four other producers were the Norwegian Directorate of Fisheries, the Norwegian Institute of Public Health, the Norwegian Institute of Bioeconomy Research and the Norwegian Directorate of Immigration, all reporting statistics to the statistical office of the European Union, Eurostat.

The peer reviewers did not find any violations of the European Statistics Code of Practice, but provided 15 recommendations for how the Norwegian statistical system could be developed and improved. Many of these recommendations were aimed at more detailed planning of ongoing initiatives, improved visibility of quality work and closer cooperation between the Norwegian statistics producers.

The recommendations included further developing the national programme for official statistics and devising an action plan for quality improvements in the Norwegian statistical system. The expert team also recommended that Statistics Norway consider the possibilities for publishing more detailed statistics, strengthening user contact and further developing the services for accessing microdata. The other authorities were recommended to clarify their role as producers of official statistics, both internally within their organisations and externally, including on their respective websites.

The follow-up of the action plans is discussed in more detail in Chapter 4.4.

3.3. Quality reviews

Systematic quality reviews are one of the tools employed to measure and assess the quality of official statistics and they are performed for selected statistics every year. In such reviews, compliance with the quality requirements in the Statistics Act and the European Statistics Code of Practice is assessed. A quality review results in a report describing strengths and weaknesses and recommendations for improvements. The responsible statistical unit devises improvement measures based on the recommendations, and the status of the measures is reported annually. The quality review framework is described in Appendix D.

In addition to specific recommendations and measures, the quality reviews promote greater awareness of the quality principles.

The recommendations from the quality reviews focus on improving the actual statistics or the systems used to produce them. Although quality reviews concern specific statistics, improvement measures may have an impact beyond the statistics under review:

- Improvement measures are often relevant for other statistics within the same domain, and their implementation can therefore impact several statistics.

- Improvement measures related to systems benefit all statistics that use those systems, e.g. dissemination and metadata systems.

In Statistics Norway, the selection of statistics for quality reviews is based on criteria adopted by the management: risk, results from previous reviews, identified errors and areas receiving major attention. Every year, the Directors' Meeting determines which statistics will undergo a quality review based on proposals from the quality team.

For external statistics, producers submit statistics for quality reviews. According to the plan anchored in the Committee for Official Statistics, all producers must undergo a quality review for one of their statistics by the end of the current statistical programme period. Achieving this objective is dependent on producers submitting statistics for review, allocating the necessary resources and participating in both their own reviews and those of others. The reviews should also be evenly distributed throughout the statistical programme period which ends in 2027.

Since 2015, a total of 25 quality reviews have been performed. Three were carried out in 2023. During 2024, five reviews were performed, three at Statistics Norway and two at other producers, NAV and Nkom. See Chapter 4 for more information on the status of improvement measures from quality reviews.

In 2025, up to six quality reviews will be carried out, including two at Statistics Norway and four at other producers. Within Statistics Norway, the statistical divisions are allocating substantial resources to the transition to the new data platform, which must be taken into account in the plans for quality reviews.

3.4. Quality indicators

Quality indicators are still used infrequently in the production of official statistics. This is discussed in more detail under principle 4. Commitment to quality in Chapter 2.2. Such indicators are important for producing fact-based input to both production and evaluation processes, identifying areas where improvements are needed and measuring the impact of measures. Two factors must be in place in order to succeed in the work relating to the use of quality indicators: 1) technical solutions for creating and presenting indicators, and 2) awareness of the importance of quality indicators for measuring various aspects of quality.

An example of a numerical quality indicator is to measure the extent of editing. What variables and units are edited most often? Monitoring such an indicator will create a fact-based basis for assessing targeted improvement measures for increasing the accuracy of the collected data. For example, changes could be made to a web form or selected respondents could be contacted. Another example of a quality indicator is to measure the effect of editing. How much does the data change during the editing process? When does the use of resources on editing have little impact on the statistical products?

The impression gained from both follow-up meetings during the quality evaluation and other activities is that the producers of statistics are aware of the value of quality indicators and want to use such indicators. However, the awareness of the usefulness of such indicators and the ability to develop solutions for creating them vary considerably from statistics to statistics. There are many good examples of the implementation of indicators. But even though the solutions exist, it is not certain that the indicators are being used, due to a lack of awareness.

In Statistics Norway, the transition to Dapla represents a golden opportunity to implement quality indicators in the statistical production process for individual statistics, as the entire production process has to be created from scratch (re-coded). In practice, however, it is apparent that the work

on implementing quality indicators is not prioritised during the hectic phase of meeting transition and publication deadlines. Several producers of statistics say that the implementation of quality indicators is high on the list of tasks not considered absolutely necessary for producing statistics on Dapla. A number of producers also point out that it is necessary to make the switch to Dapla first, and then resume improvement work, such as implementing quality indicators. This could be a sensible approach, provided that a plan is drawn up for such improvement work and provided that no technical solutions have been selected that would prevent this in the future.

The level of interest in quality indicators among statistics producers is increasing, in the form of both course attendance and in other ways, such as enquiries linked to practical implementation. Many statistics producers are unsure how indicators should be implemented. This applies to both which indicators should be given priority and how the implementation should be carried out.

Although the formulas for many of the indicators are simple, it can be challenging to create or collect the data needed to calculate these formulas. Dapla has no built-in support for quality indicators, and producers of statistics currently have to code solutions for calculating quality indicators themselves. In Dapla, this can be more challenging than in the old production solutions, which are based to a greater extent on common solutions with built-in support for capturing log data and automatically creating quality indicators during the production process. Work is under way to establish a common structure for log data in Dapla. A proposal for a standardised format for log data has been specified. This format will be tested on a number of statistics before any conclusion is reached as to whether it could constitute a recommended or mandatory format.

The establishment of common editing solutions in Dapla is also under way. Such solutions offer opportunities for implementing quality indicators in the solution itself, and therefore for all statistics that use the solution. Consequently, a common format for log data and the use of common editing solutions are important for increasing the use of quality indicators in the slightly longer term.

3.5. User contact

Official statistics are intended to meet users' needs, which can vary from user to user and for different types of statistics. For some statistics, it might be more important that the figures are published quickly, rather than being as accurate as possible. For others, accuracy might be the most important factor. Regardless of which principles of good quality in statistics are the most important for the different users, the statistics must be of such a quality that the figures are reliable and can be used as a basis for important decision-making in society. It is also important to consider which user needs can be met within the given resources.

In order to understand users' needs, it is important to have sufficient contact with users. Statistics Norway has identified six target groups for the dissemination of statistics:

1. The general public: anyone without particular competence in utilising statistics but who is interested in questions that official statistics can answer.
2. The media: those working for newspapers and broadcast media. Disseminators of official statistics to wide audiences.
3. Analysts/decision-makers: disseminators of data to decision-makers in both the public and private sector; as well as being decision-makers themselves.
4. Researchers: researchers at universities and university colleges, as well as students at master's level and above.
5. School pupils: pupils in lower secondary and upper secondary schools in Norway.
6. Respondents: individuals who supply information that forms the basis for official statistics.

The statistics are also used internally by the producers of official statistics for analysis, research and collating other statistics. International organisations, such as the UN and Eurostat, are also important users of official statistics. This particularly applies to statistics that are mandated via the EEA Agreement or covered by a cooperation through other agreements.

Advisory committees and established forums

User contact forums have been established for approximately two thirds of Statistics Norway's statistics. Statistics Norway has established 19 advisory committees across various statistical domains. Consideration is being given to creating more advisory committees for certain domains. This is a recommendation from the previous quality report.

Two thirds of external producers of official statistics do not have regular forums for user contact. Those who produce only a small quantity of official statistics report that setting up an advisory committee for a small statistical domain can be resource intensive.

In addition to user contact forums, there are other arenas for user contact, such as annual meetings with government ministries, reference groups, KOSTRA⁵ working groups and other regular contact with users.

Informal user contact

Several statisticians report having significant user contact, despite there being no established forums. This contact also provides insight into user needs. User contact takes place directly via email and telephone to the statisticians responsible for the relevant statistics or through a central support team. For most statistics, the names, email addresses and phone numbers of those responsible for them are displayed on the statistics' home page. User contact also takes place through central support teams or switchboards. It is important that these enquiries are conveyed to the relevant statisticians.

In the quality evaluation, about one third responded that they were aware of important user needs that are not being met. This is around the same proportion as in 2023. Meeting some user needs may be associated with both technical and resource-related challenges. It is important to carry out a cost-benefit analysis to assess the value of meeting a user need against the costs. During the follow-up meetings to the quality evaluation, several respondents mentioned that confidentiality concerns may also prevent statistics from being published at the level of detail that users would like.

User focus groups

In 2024, Statistics Norway conducted a total of five quality reviews of individual statistics within Statistics Norway and among other producers, with associated focus groups among users of the statistics.

The focus groups were composed of users from the six target groups for dissemination of the statistics mentioned above. The users indicated that they trust the figures in official statistics and are satisfied with the dialogue with the responsible statisticians if they have questions concerning the statistics or find errors. The users say that any errors that are discovered are quickly corrected and explained.

Users in all of the focus groups mentioned that, although news articles and comments on the figures are useful, they would like to see more explanations and context for the figures. As regards

⁵ KOSTRA stands for Municipality-State-Reporting. Via KOSTRA, all local and county authorities in Norway submit figures on their activities to Statistics Norway.

Statistics Norway's statistics, it was noted that it is difficult to navigate Statistics Norway's website and that users do not understand the value of having a key figure in a large font without any further explanation on the statistics page.

One of the findings from the focus groups is that users, especially expert users, would like an explanation of the methodical choices that have been made and clear definitions of terms. Among these, several stated that they need to look at sub-groups of the population itself and would like to see more background variables for example in the Statbank. With effect from spring 2025, the key figure has been removed from Statistics Norway's statistics pages.

Users want to see more visualisations illustrating basic findings and complex clickable visual presentations. This corresponds with wishes expressed by the statistics producers themselves, who want to be able to publish different types of visualisations on the statistics' home pages. For further discussion, see Principle 15. Accessibility and clarity in Chapter 2.3.

User survey for ssb.no

The user survey is discussed in Statistics Norway's annual report. The results from Statistics Norway's annual user survey on ssb.no show a fall in the proportion of participants who were satisfied or very satisfied with ssb.no, who found what they were looking for, and who found it easy to find and understand the content.

The survey has been revised and was conducted at a slightly different time, which also led to changes in the respondents. The results are therefore not directly comparable with previous years. It is too early to draw clear conclusions after a single user survey based on a new methodology, but Statistics Norway will closely monitor developments and implement measures when necessary.

4. Improvement measures

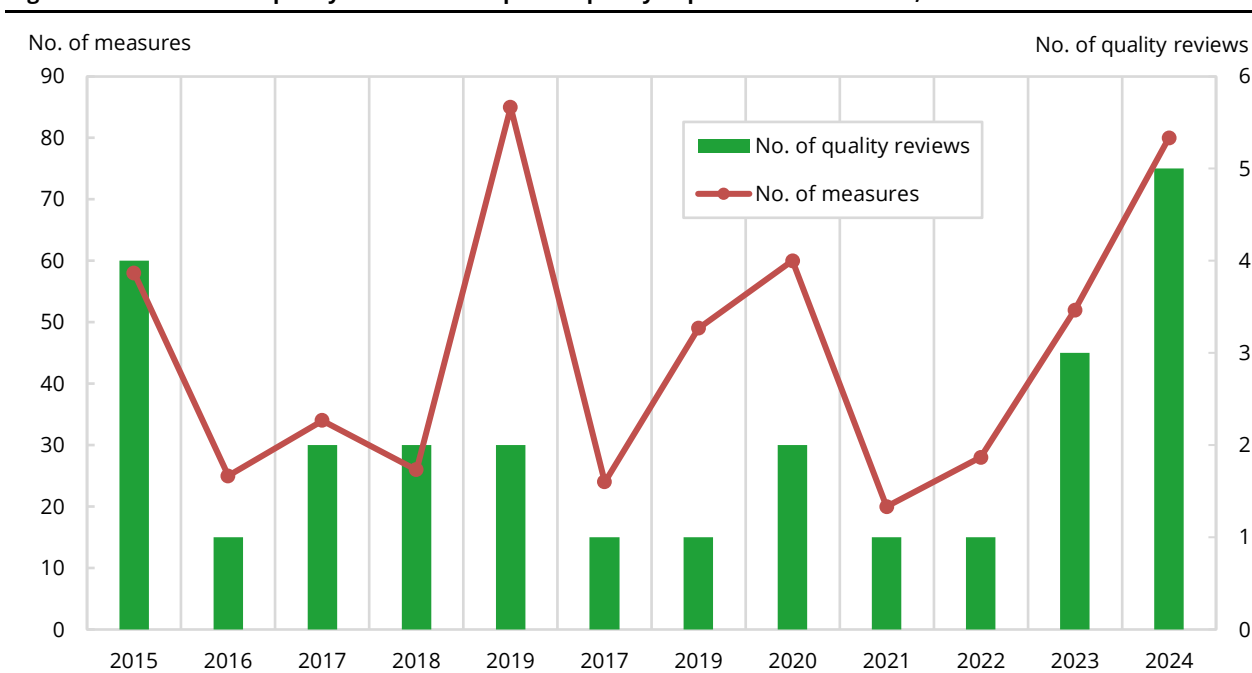
The follow-up of various quality improvement measures is a vital aspect of the quality work. Action plans are drawn up following quality reviews, quality evaluations and peer reviews. The measures are implemented by the statistics producers themselves or their support functions, and the action plans are then followed up over time until the measures are considered implemented.

4.1. Improvement measures after quality reviews

In 2024, five quality reviews of individual statistics were conducted, three in Statistics Norway and three among other producers (NAV and Nkom). The experiences of the quality reviews have been good. They contribute both to greater awareness of the quality principles and specific improvements to statistical processes and products. The process of implementing quality reviews was further streamlined in 2024, but there remains scope to reduce the calendar time required to complete the reviews.

Since 2015⁶, 25 quality reviews have been carried out. Figure 4.1 shows the status of the 25 quality reviews from the period 2015–2024. Following a quality review, the statistics producers draw up proposals for improvement measures. The status of the measures is updated by the statistics producers and marked as completed once they have been concluded, or when the measures become part of a regular activity in the production of statistics. A total of 541 measures have been planned since 2015, of which 440 (81 per cent) have been completed.

Figure 4.1 Number of quality reviews and reported quality improvement measures, 2015-2024



Source: Statistics Norway

⁶ During the period 2011–2014, a total of 21 quality reviews were conducted within Statistics Norway, all of which have been completed. These are not included in the overview in this report.

4.2. Improvement measures after quality evaluations

The report on the quality of official statistics for 2024 (SSB, 2019-2025) contains a total of 64 recommendations (K1–K64) for improving the quality of official statistics. Statistics producers conduct independent cost-benefit analyses of the recommendations and draw up plans with prioritised measures based on the assessments. The action plans contain information on the start and completion dates of the measures, as well as the status of the work. Statistics Norway obtained the status of the action plans from all producers as of February 2025.

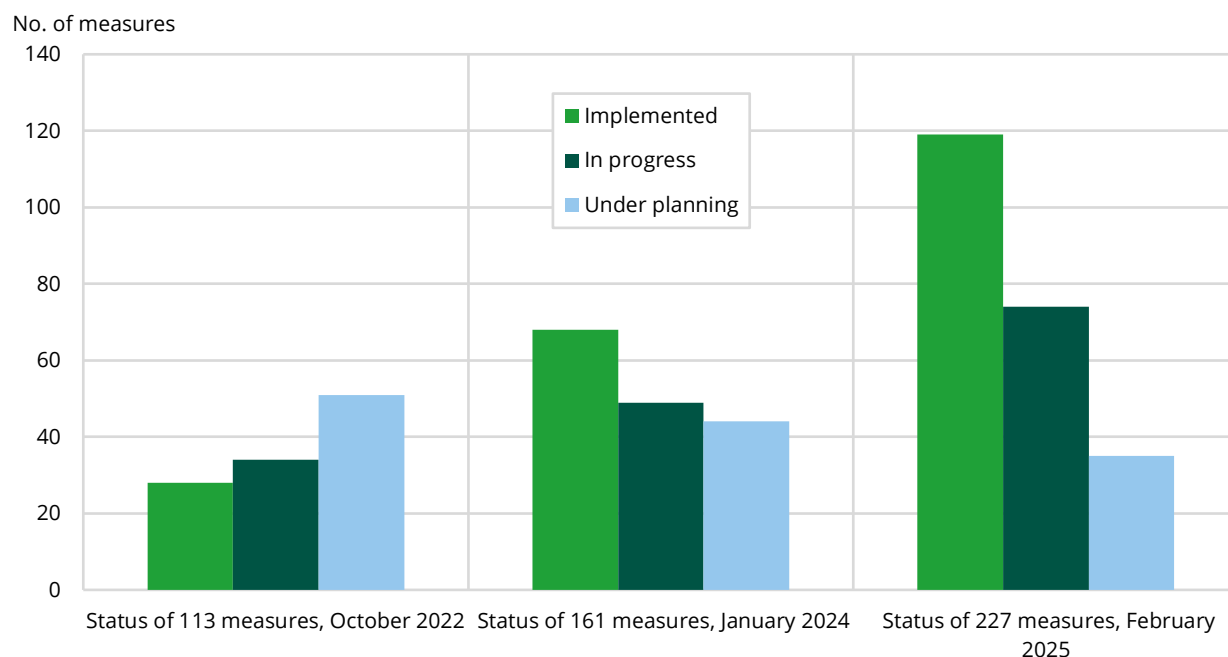
All producers have devised an action plan, and just over half of the measures have already been implemented in areas such as documentation and transparency. Figure 4.2 shows the status of reported measures in 2022, 2024 and 2025. During the period 2022–2024, a total of 161 measures were planned, with 68 of these being implemented by the time of the status report in January 2024. The status report in February 2025 covered 228 measures, of which 52 per cent had been implemented. Statistics Norway is responsible for 40 per cent of the measures, with the remaining 60 per cent being planned by the other producers. External producers are responsible for 17 per cent of all official statistics, measured in terms of the number of published statistics.

Since the first report on the quality of official statistics was published in 2022, the greatest quality improvement has been linked to more and better written documentation and guidelines, and the publication of these, particularly among external producers. These improvements are largely linked to the principles that are relevant at institutional level. For principles that are relevant at statistical level, no significant improvements have so far been measured. In this regard, we obtained such information in 2023 and 2024, and the planned measures will hopefully have a visible effect over time.

Although many measures have been planned and implemented, there are still some recommendations where it would be desirable to see more measures planned and implemented. This applies for example to the recommendations concerning quality indicators, uncertainty and confidentiality. In some cases, complying with these recommendations will require more resources but could lead to substantial quality gains.

The recommendations that have been made vary in nature, and there may be considerable differences as regards how simple they will be to comply with. The proposed measures also differ in terms of their nature, scope, complexity and effect. Some measures will be easier to implement than others, while others will be more challenging. Some measures have a narrow scope, with limited impact on overall quality, while other measures have the potential to lead to substantial improvements in quality and will have a positive effect for many producers. Examples of such measures include the development of common solutions which all producers can benefit from; these are described in more detail in Chapter 6.2. Thus, counting the number of implemented measures gives some indication of the level of activity and follow-up, but is not in itself sufficient as an indicator of quality improvement.

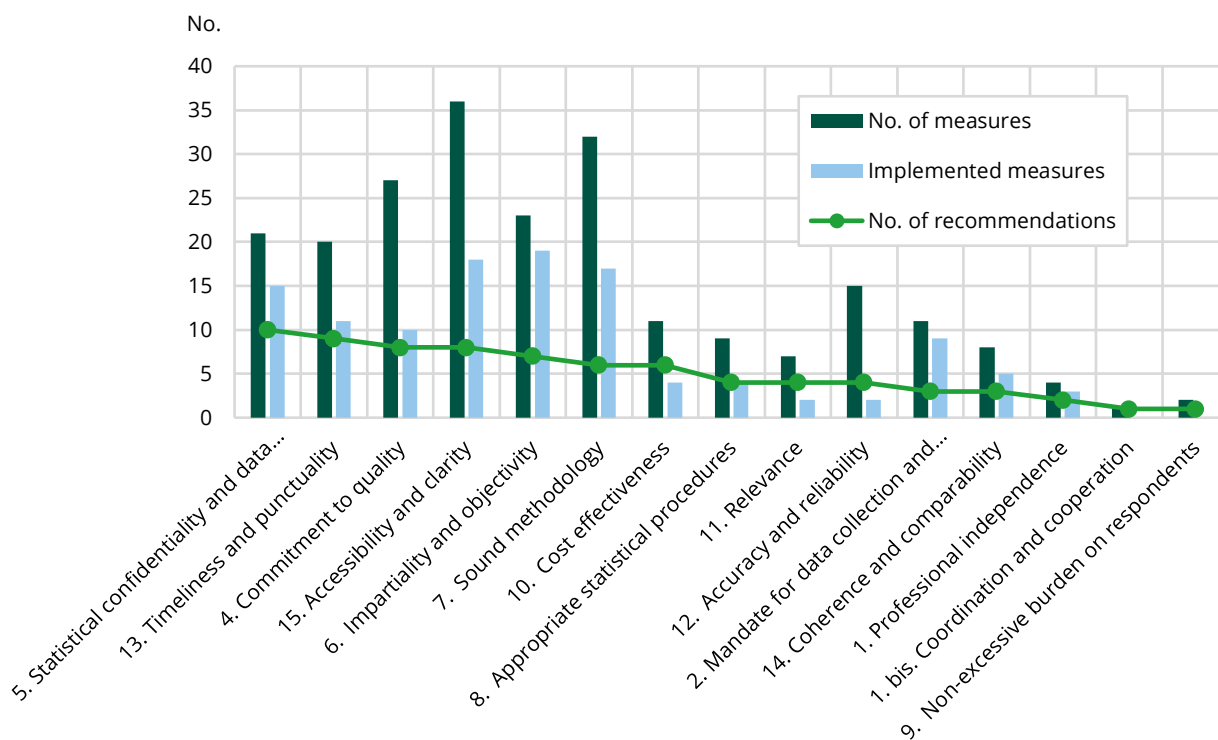
To assess whether and how the measures help improve the quality of the statistics, it is necessary to supplement the counting of measures with quality assessments and relevant quality indicators. This could for example involve assessments of documentation, measurements of compliance with standards, user satisfaction or identified weaknesses in subsequent quality reviews. Such a comprehensive assessment of the impact of the measures across all producers will, however, be resource intensive. The use of resources to measure impacts must therefore be weighed against the need to use resources to implement the improvement measures. A balance must be struck between documenting improvements and actually creating improvements.

Figure 4.2 Status of reported measures, 2022, 2024 and 2025

Source: Statistics Norway

Relationship between recommendations and measures

This section takes a closer look at the relationship between recommendations and measures, and how these are distributed between the various principles in the European Statistics Code of Practice.

Figure 4.3 Number of recommendations and measures per quality principle⁷

Source Statistics Norway

⁷ Principle 3. Adequacy of resources, has no recommendations and is therefore not included in the figure.

Figure 4.3 shows the number of recommendations and measures by quality principle. Since the start of the quality evaluations, a total of 76 recommendations have been made concerning quality improvement measures. Most recommendations have been made for principle 5. Statistical confidentiality and data protection, followed by principle 13. Timeliness and punctuality, 4. Commitment to quality, and 15. Accessibility and clarity.

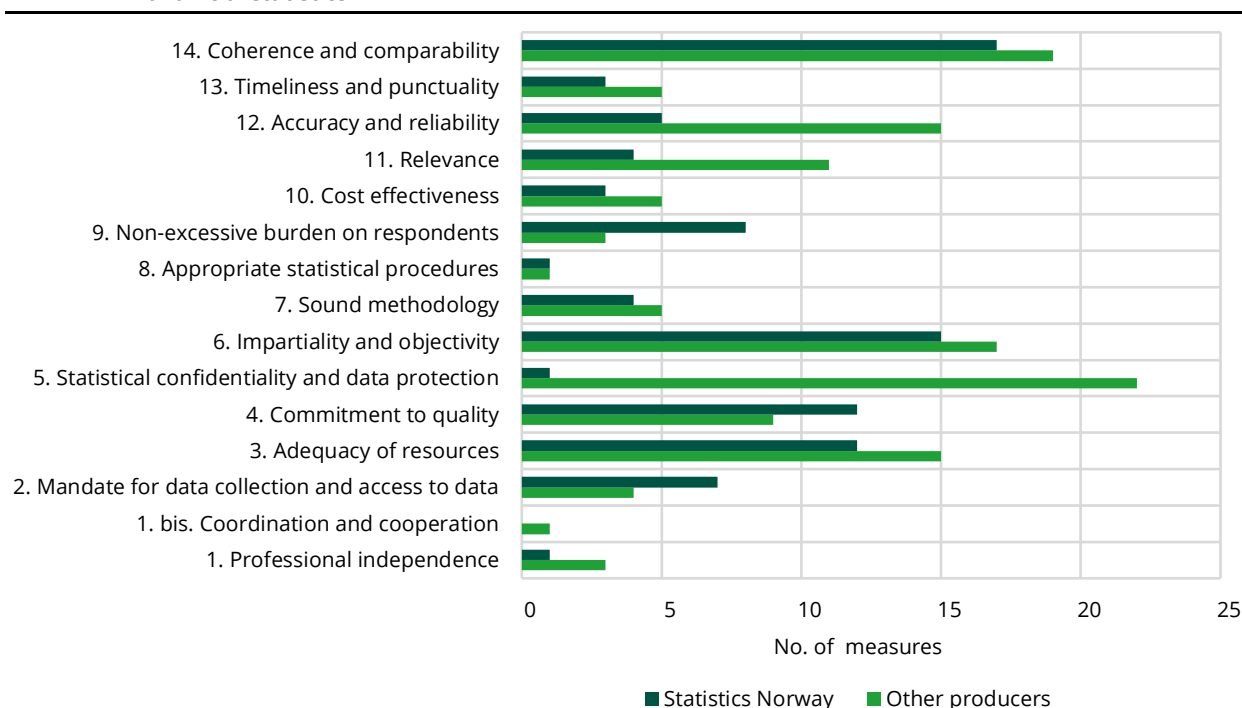
For comparison, most measures have been implemented towards principle 15. Accessibility and clarity, principle 7. Sound methodology, and principle 4. Commitment to quality.

The principle with the most implemented (completed) measures is principle 6. Impartiality and objectivity. For this principle, 22 out of 23 measures have been established by external producers of official statistics, and 19 of these measures have been implemented. The measures primarily concern the establishment and publication of guidelines for impartiality and objectivity, the establishment of a statistics calendar, the publication of customised analyses, and clarification of the role of statistics producer.

For principle 5. Confidentiality and data protection, 10 recommendations have been made. A total of 21 measures have been established, at least 70 per cent of which have been implemented. Statistics Norway is responsible for 12 of the measures, while nine have been established by other producers. Most of the measures concern competence enhancement. Experience from the quality evaluation and other work indicates that this work still needs to be followed up.

The principle with the most measures is principle 15. Accessibility and clarity. For this measure, a total of 36 measures have been planned, half of which have been implemented. Around 50 per cent of the measures concern visual presentation. In this case, the number of measures is distributed relatively equally between Statistics Norway and the other statistics producers. Statistics Norway has a number of measures aimed at further development and competence enhancement. Some of the measures concern documentation and publication on the website, and most concern external producers.

Figure 4.4 Number of measures per quality principle broken down between Statistics Norway and other producers of official statistics



Source: Statistics Norway

Figure 4.4 shows the variation between Statistics Norway and other producers in relation to the number of measures per principle. Just 40 per cent of the measures belong to Statistics Norway, and some of this can be explained by the fact that Statistics Norway's measures are set up at department level, rather than per division or statistic. The other producers have implemented quality improvement measures concerning institutional factors to a greater degree. As the central statistics producer, Statistics Norway has established the institutional basis over a period of many years.

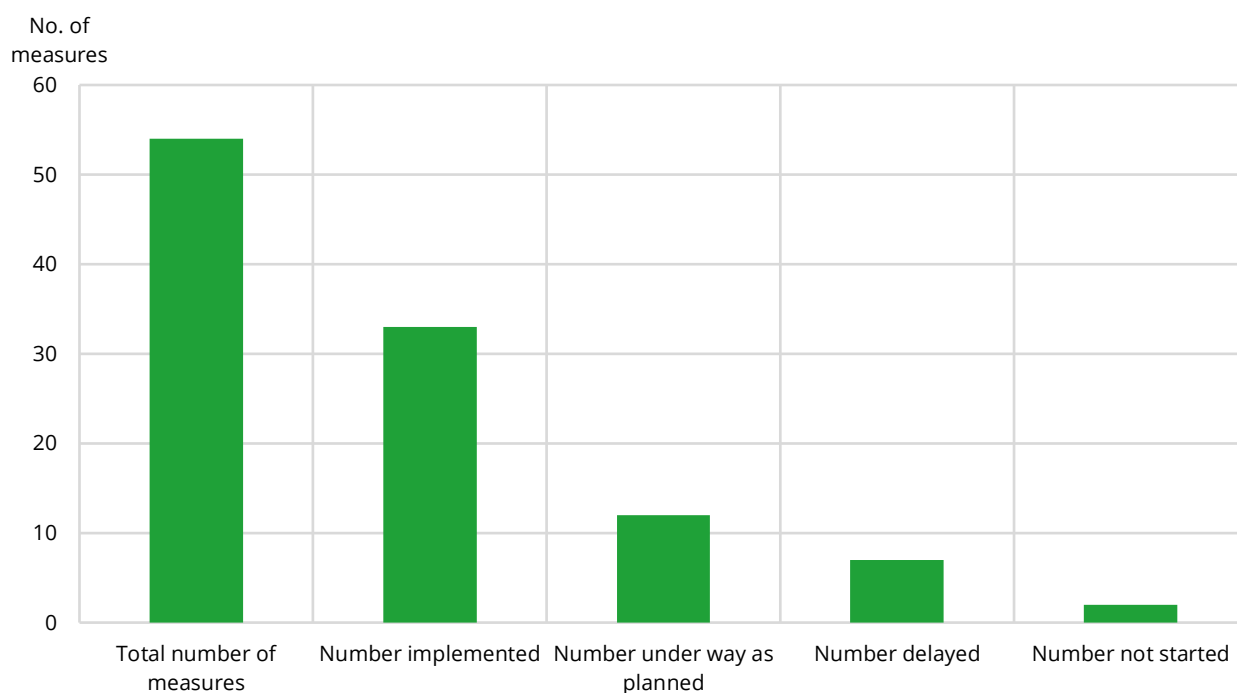
4.3. Measures following peer review

Statistics Norway and the other four authorities that participated in the peer review in 2021 have drawn up a joint action plan to follow up on the recommendations. The plan contains a total of 54 measures, of which 38 will be implemented by Statistics Norway and 16 by the other four authorities.

The action plan has been approved by Eurostat, and annual reports will be submitted on the implementation of the measures from the end of 2024 to the end of 2027. The complete action plan, with detailed descriptions and deadlines, has been published on the websites of Eurostat and Statistics Norway (Eurostat, 2021-2023).

A preliminary status review as of the end of 2024 shows that implementation of the measures is largely proceeding as planned. Of the 54 measures, 33 were reported as completed by 31 December 2024. Work on 12 of the measures was under way, while seven of the measures had been delayed according to the original schedule. Work on the last two measures had not yet started.

Figure 4.5 Number of measures after peer review. Status as of 31.12.2024

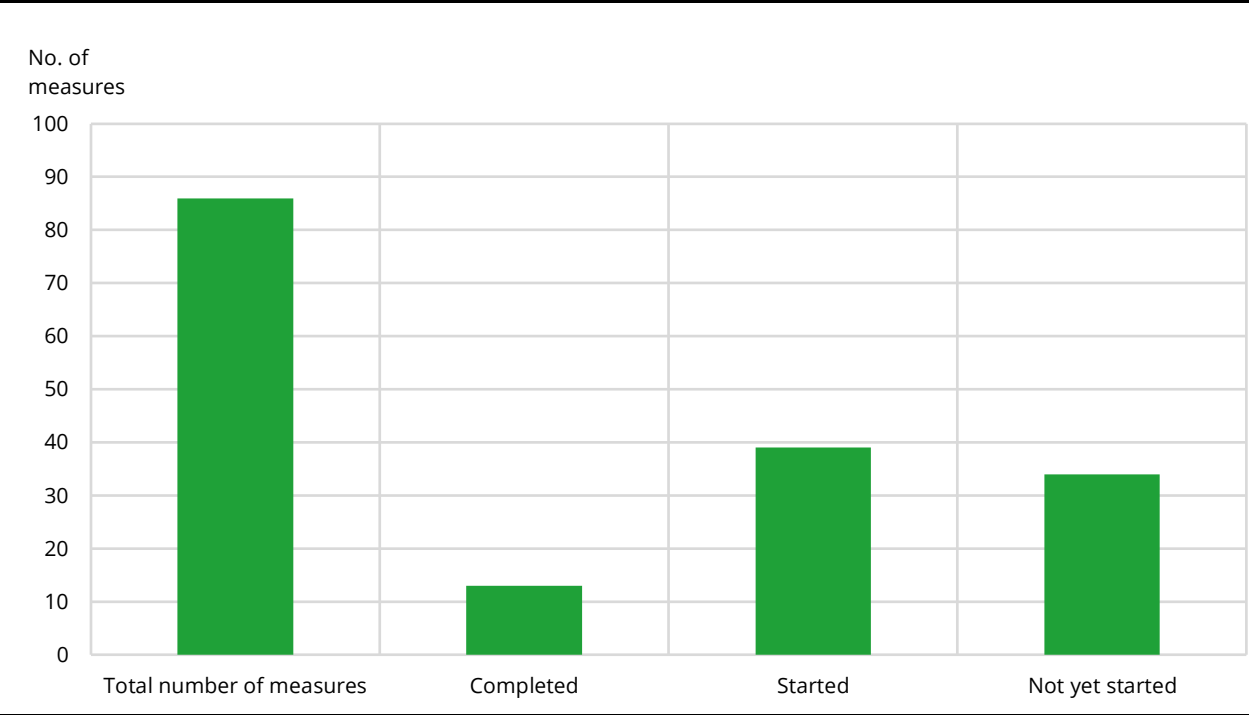


Source: Statistics Norway

4.4. Development measures in the statistical programme

The national programme for official statistics 2024–2027 contains a total of 86 measures to develop new and further develop existing official statistics. The measures are important in order to meet the needs and expectations of users for official statistics and are relevant to quality principles such as relevance, timeliness and accuracy. The development measures are described in the documentation report for the statistics programme (SSB, 2024) and are split between 69 measures in Statistics Norway and 17 in other producers. In 2024, Statistics Norway established an annual reporting scheme to follow up on the progress of the development measures. By the start of 2025, a total of 13 development measures had been completed. Eight of these were existing statistics, which became official from 1 January 2024. Of the 39 measures that had been initiated, 32 were at Statistics Norway and seven at other producers. One of the largest measures under way is the establishment of a set of environmental accounts in a collaboration between the Norway Environment Agency and Statistics Norway. The remaining 34 development measures, 32 in Statistics Norway and two in other producers, have not yet been started. It is uncertain whether it will be possible to implement several of the measures with the desired scope and level of ambition. At Statistics Norway, the major transition to a new data platform has been given a very high priority, which could limit the capacity to implement development measures in the statistical programme for a certain period.

Figure 4.6 Number of development measures in the national programme for official statistics. Status as of 31.12.2024



Source: Statistics Norway

5. Other arenas and processes for the follow-up of quality

5.1. Committee for Official Statistics

In 2024, the committee discussed a number of cases linked to improvements, the streamlining of official statistics and the role of statistics producer. Several producers presented selected statistics and opportunities and challenges in working with them. Other themes were the principles for the control and correction of data, documentation of classifications and code lists, use of quality indicators, quality of administrative data, data protection and understanding of statistics.

In 2024, Statistics Norway assessed the organisation of the committee on behalf of the Ministry of Finance. In 2025, a working group will be set up comprising six committee members, who will assist with the coordination and planning of the committee's work. The aim is to strengthen the coordination, quality and development of official statistics in Norway. The committee members have noted that the exchange of experience at technical and operational level, through seminars in the methodology network and the dissemination network and courses organised by Statistics Norway, is extremely useful. These activities are discussed in more detail in Chapter 5.2.

5.2. Courses and networks

In 2024, a total of six quality courses were held in Statistics Norway. Five of these were open to members of the committee, while one was intended for an individual division within Statistics Norway. These courses were entitled "Quality – guidelines and models" and "Quality individuals and administrative information" respectively. A total of 75 participants from Statistics Norway attended the courses, in addition to 15 external participants. Representatives from the quality team have also given presentations at Statistics Norway's introductory course for new employees. The feedback from the participants indicate that they found the courses useful.

In addition to the quality courses, Statistics Norway has arranged a total of 11 courses on methodology, most of which have been open to members of the Committee for Official Statistics. The methodology courses held in 2024 were attended by just under 400 participants, 135 of whom were external. Four digital methodology seminars were held with around 200 participants from both Statistics Norway and external organisations. In addition, six internal workshops on quality were organised in connection with the transition to Dapla, four in Oslo and two in Kongsvinger, with a total of around 160 participants.

During 2024, the dissemination network grew to around 90 participants, who represent the members of the Committee for Official Statistics, including both producers and others. From 2025, register owners and other producers of official statistics have joined. The dissemination network is intended as a meeting place and a discussion forum for those involved in the dissemination of official statistics from the communication, statistics production and technical side.

In 2024, the dissemination network arranged several thematic Teams meetings. One concerned visualisations, while another concerned the principle of equal treatment⁸ of users when statistics are published.

⁸ Principles for the equal treatment of users in connection with the publication of statistics and analyses are described at ssb.no: <https://www.ssb.no/en/omssb/kvalitet-i-offisiell-statistikk/prinsipper-for-kommunikasjon-og-formidling/prinsipper-for-likebehandling>

Statistics Norway also organised a joint full-day seminar for the dissemination and methodology networks about uncertainty in statistics and how uncertainty can be communicated to users. The seminar attracted a total of 44 participants from 14 producers of official statistics.

Statistics Norway shares relevant publications concerning standards, quality, principles and guidelines in the methodology network. In 2024, two such publications were shared, one concerning principles and guidelines for editing and one concerning quality indicators.

5.3. Statistics Norway's Standards Committee

The Standards Committee is responsible for the central standardisation work carried out within Statistics Norway, and acts as a driving force and coordinator for the harmonisation of existing coding systems and variables and the development of new, shared functionalities/services associated with these. All divisions within Statistics Norway are represented on the committee. The work of the committee lays the foundations for the efficient use and reuse of data collected, processed and managed by Statistics Norway. Although this is currently an internal committee at Statistics Norway, some of the results of the committee's work, such as guidelines and standards, are relevant for and shared with all producers of official statistics.

In 2024, the Standards Committee considered a number of cases that can contribute to better quality in the production of statistics. One example is a standard for rounding, which describes how figures in statistical publications should be rounded off, when the purpose is not linked to confidentiality, but rather readability or uncertainty. Similarly, the Standards Committee has recommended a standard for explanatory codes for editing. In this regard, it is proposed that all statistics should use the same codes to specify the reason when data values are assessed and, where appropriate, corrected manually.

The Standards Committee has conducted a broad review to identify the need for new standards and support for the use of standards in the production of statistics linked to the transition to the new data platform (Dapla). The review will be followed up by measures in 2025.

5.4. Statistics Norway's Confidentiality Committee

The Confidentiality Committee's main task is to devise general and practical rules and guidelines for how Statistics Norway interprets the statutory provisions concerning confidentiality in published statistics and customised tables. The work is intended to provide a basis for efficient and comprehensive handling of confidentiality. Although this committee is currently an internal committee within Statistics Norway, the results of the committee's work, such as guidelines and standards, will be shared with and relevant for other producers of official statistics.

In 2024, one of the committee's tasks was to clarify the definition of disclosing individual information. In practice, the interpretation of the 2019 Statistics Act has resulted in a stricter approach to publication at detailed level, with more suppression (masking) in some statistics. The committee has concluded that there is no evidence to suggest that the Norwegian Parliament (*Stortinget*) wanted the publication level for official statistics to be tightened, and that only individual information included in the statistical basis should be actively protected. A risk-based approach to identification of individual information about a single entity is in accordance with the law.

6. Developing the quality system

6.1. Resources for the production and quality assurance of official statistics

No new information has been collected concerning resource use for the production and quality assurance of official statistics in 2024. Measuring resource use is challenging for several reasons:

- There are varying practices for the logging of time usage among the producers.
- For external producers, it can be difficult to distinguish between time spent on the production of official statistics from administrative tasks.
- No guidelines have been issued concerning how support functions, such as IT, communication and dissemination services, should be included in the resource estimates.

Since the previous report, information has been obtained from Statistics Sweden concerning how they measure resource use in Sweden. Statistics Norway will consider whether the Swedish system can be adapted to the Norwegian statistical system. The topic of resource use will be followed up by the Committee for Official Statistics.

6.2. Developing common solutions

The systems used for the production and dissemination of official statistics are fragmented and characterised by the fact that the 16 producers have their own solutions throughout the entire production process, from the collection of data to the dissemination of official statistics. The exceptions are a number of national common components, such as Altinn as a collection tool, and some use of open-source code tools such as PxWeb for dissemination. In some domains, there is potential to streamline and strengthen user orientation by establishing common solutions across the producers:

- Universal release calendar for all official statistics
- Common dissemination solutions with Statbank
- Common metadata solutions, such as Klass for coding systems
- Common structure and solutions linked to the user-oriented documentation of statistics, such as "About the statistics".

These domains have been discussed in previous quality reports, and work has also been done with regard to some of them, without any specific solutions materialising yet.

Status of the work linked to the common solutions that have been discussed in previous reports:

- SIMS/Reference metadata: This work has not been given a high priority by Statistics Norway, and no further work was done in 2024.
- Dissemination of statistics by other producers in Statistics Norway's Statbank: Statistics Norway continued to work on technical solutions to some extent in 2024, although no other producers have so far tested the solutions.
- Open Klass to other producers: This will require further development of the system and is a resource and prioritisation question which must be considered further. The needs of external producers must be reviewed, and it will be necessary to clarify whether such an expansion would raise fundamental questions.

To expedite the work to introduce common solutions, it will be necessary to adopt a more purposeful and binding approach. It is natural that Statistics Norway, as the national statistical authority, takes primary responsibility for this work, but it must be done in collaboration with the

other producers. Such solutions require development and investments, and it will be necessary to clarify how the various areas should be organised. How they should be financed must be clarified in more detail, including both the producers' own contributions and the opportunities to apply for external funding. It must also be clarified how operation and management of the solutions should be addressed.

Statistics Norway's dissemination solution for statistics, Statbank (PxWeb and PxAPI), is a free open-source code tool which is used by more than 150 institutions and organisations around the world, including a few of the producers of official statistics in Norway. A completely new, technically modern and more user-friendly version of PxWeb and PxAPI will be launched in autumn 2025. The producers of official statistics should consider using this tool in their dissemination of statistics. It will both improve each producer's dissemination of statistics and make it easier for users to compile official statistics from different sources.

New recommendations 2025:

- K76⁹: Explore the development, funding and administration of common solutions across producers of official statistics, within the following domains: dissemination, metadata and documentation.
- K77: It is recommended that producers of official statistics adopt PxWeb and PxAPI to ensure the efficient, user-friendly and comprehensive dissemination of official statistics.

6.3. Dissemination of official statistics

As discussed previously in the report, there is considerable variation in the dissemination of official statistics among the statistics producers. In the case of some producers, it is difficult to find the official statistics via either search engines or the website. There are also deficiencies linked to metadata and user-oriented documentation of the statistics, and in procedures for the advance announcement of publication dates. It is important that the producers work to develop the dissemination of statistics and follow up on the recommendations in Chapter 2 with specific improvement measures. Statistics Norway will follow up on the development work in a dialogue with the producers. The topic will also be brought up within the Committee for Official Statistics and the dissemination network.

In some domains, it will be most appropriate for producers to collaborate on standardisation and common solutions, as discussed in Chapter 6.2.

6.4. Developments within Statistics Norway that impact on the quality assurance system

Statistics Norway is currently under way with a comprehensive modernisation project, where the most important development initiative is the transition to a new, cloud-based data platform (Dapla). The transition will mean that all statistics production will have to be re-built up from the ground up and that all necessary common functions will have to be re-established.

This transition means that the current production of statistics, which uses various systems and data stored and run on ground systems, will be replaced by a comprehensive cloud-based solution. Code written in SAS will be re-coded in the open-source code programming languages Python or R. Research. Research and analysis activities will also have to be adapted to the new platform. The

⁹ This recommendation also covers previous recommendation K13 (2022). Statistics Norway should prioritise the work to develop universal statistics calendars for all official statistics on ssb.no. The other producers are encouraged to actively work to announce the publication of their statistics on ssb.no.

transition will require Statistics Norway's employees to build competence in new technology and new coding languages to ensure a successful transition.

Dapla offers a raft of new opportunities. The platform will enhance Statistics Norway's ability to meet increasing user expectations and benefit from technological development. It will also make it easier to find, process, connect, manage and share data, while data protection will also be improved. Furthermore, it will offer more scalable storage and processing of data and better handling of large quantities of data. The overarching aim is to better equip Statistics Norway to meet society's needs as regards data, statistics, analyses and research in line with societal development. The transition will also lead to opportunities for considerable quality improvements. As part of the transition, an assessment is being made of the opportunities to bring about quality improvements in the production processes for each individual statistic. Examples of quality improvements which are relevant to a number of statistics are greater automation, which will reduce the risk of manual errors and better timeliness, the use of better methods for increased accuracy, and the use of new data sources for more detailed statistics.

At the same time, the transition will entail numerous challenges. During the transition period, Statistics Norway will have to deal with both existing production systems and infrastructure on the ground and the new cloud-based solution, in addition to the integrations between these two systems. This complexity increases the risk of security incidents and quality problems. The schedule for the transition is ambitious given Statistics Norway's resource situation, which increases the likelihood of human error and means that there will not be time to realise possible quality improvements.

Over the coming years, the work to transition to a cloud-based platform and the challenges this work entails must also be reflected in Statistics Norway's central quality work. An assessment must be made of how the modernisation work will impact the quality of Statistics Norway's statistical output. Any negative impact on quality in early versions of the production solutions must be identified to ensure that they undergo further development and deliver the desired benefits. The established tools, quality reviews and quality evaluations will be well-suited to monitoring the transition work. Quality reviews can be conducted for statistics which are at different stages in the transition to Dapla. In the quality evaluation, the questionnaire can be used in the self-evaluations, adjusted to measure different aspects of the transition work, and the topic should be brought up during the follow-up meetings. Because a key part of the transition work is to code the production process itself in a new programming language, consideration will be given to using methods to review the code as part of the work to examine quality. If, during the transition process, statisticians discover improvements that should be made or errors that should be corrected in the production process, which have an impact on statistical results, it is important that information is provided on the statistics' home page. It may also be of importance for comparability with previous periods.

6.5. Quality culture

During 2024, Statistics Norway contributed to an expert team for the United Nations' Statistics Division developing a maturity model for quality culture. The work on the maturity model has now been completed, and the model was adopted by the United Nations Statistical Commission in March 2025. In 2025, further consideration will be given to whether and, if relevant, how the model should be implemented in Statistics Norway and the Norwegian statistical system.

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Appendix A: Overview of the producers of official statistics

Table A1 Number of statistics in the statistical programme 2024–2027, by domain and statistics producer¹⁰

Domain	Responsible authority. National programme for official statistics 2024–2027. As of 1 January 2024.														
	DFØ	NIPH	Norwegian Directorate of Fisheries	IMDi	Norwegian Agriculture Agency	Norwegian Food Safety Authority	Norwegian Meteorological Institute	Norwegian Environment Agency	NAV	NIBIO	Nkom	Norad	NVE	Norwegian Offshore Directorate	UDI
Labour market and earnings									5						14
Banking and financial markets															10
Population				1										9	20
Construction, housing and property															11
Energy and manufacturing												4	1		14
R&D, technology and innovation											1				10
Health and social care		7													11
Income and consumption															4
Culture and recreation															10
Agriculture, fisheries and aquaculture			6		5	1				2					29
National accounts															9
Nature, climate and environment							1	2							24
Public finance												1			11
Prices and price indices															12
Social conditions and crime									12						16
Transport and tourism															19
Education															20
International economic relationships															13
Elections and democracy	1														12
Wholesale and retail trade and service activities															8
Establishments, enterprises, and accounts															12
Total no. of statistics	1	7	6	1	5	1	1	2	17	2	1	1	4	1	9
															289
															348

Source: Statistics Norway

¹⁰ The full names of the producers are given in Chapter 1.3.

Appendix B: Recommendations and improvement measures from the quality evaluations

Table B1 Recommendations and improvement measures from the quality evaluations

Recom- men- dation no.	Recom- men- dation given, year	Recommendation	No. of measures	No. of measures implemen- ted as of Feb. 2025	Of which implemen- ted Jan.-Feb. 25	Status
K01	2022	Producers with no manager with overall responsibility for the production of statistics ensure that such a position is established and made visible on the producer's organisation chart.	3	3	1	
K02	2022	Producers of official statistics engage in cooperation that develops and promotes innovation in statistics production.	1	0	0	
K03	2022	Carry out quality reviews among the smaller producers and invite employees from small-scale production processes to participate in quality reviews at other producers.	3	2	0	Completed 2024
K04	2022	Offer staff working with the production of official statistics training in statistical confidentiality.	10	9	5	Completed 2025
K05	2022	Statistics Norway develops courses on statistical confidentiality for all producers of official statistics.	2	1	0	
K06 ¹¹	2022	Establish a routine for external parties who carry out commissioned assignments for producers of official statistics to sign a confidentiality agreement.	1	1	0	
K07	2022	The results of the ongoing work at Statistics Norway to introduce guarantees in accordance with the GDPR and the provisions of the Statistics Act on information security should be documented and made available to other producers of official statistics through the Committee for Official Statistics and the methodology network.	1	1	1	Completed 2025
K08	2022	All producers should have written guidelines for impartiality and objectivity in the production and presentation of statistics, and publish them on their website. They can refer to or reuse guidelines available on ssb.no.	7	7	3	
K09	2022	All producers should prepare written documentation on how the statistics are produced and keep the documentation up to date.	18	11	4	Replaced by K67 and K68
K10	2022	Documentation of the statistical production is published on the statistical authority's website.	6	3	1	Replaced by K67
K11	2022	All producers should announce the date and time for the release of statistics at least three months in advance and adhere to the announced date and time for all users.	6	5	0	
K12 ¹¹	2022	All producers should announce corrections to published statistics.	1	1	1	
K13	2022	Statistics Norway should prioritise the development of a common release calendar for all official statistics on ssb.no. Other producers are encouraged to actively work towards announcing the publication of their statistics on ssb.no.	3	1	0	Replaced by K76
K14	2022	We recommend that producers familiarise themselves with the principles of revision developed by Statistics Norway and make them known to their users, for example by referring to Statistics Norway's website.	2	2	1	
K15	2022	When someone outside the statistics production team has access to statistical output prior to publication, this deviation must be justified and made known to users in connection with publication.	1	1	0	
K16	2022	Producers of official statistics who use data from administrative data systems (registers) should enter into agreements with data owners regarding the supply of data and cooperation on quality, for example according to a template from Statistics Norway.	6	5	0	

¹¹ New producers have begun producing statistics and the status for this recommendation is no longer 'completed'.

Recom- men- dation no.	Recom- men- dation given, year	Recommendation	No. of measures	No. of measures impleme- nted as of Feb. 2025	Of which impleme- nted Jan.-Feb. 25	Status
K17	2022	Ensure that user testing of questionnaires is carried out systematically.	2	1	0	
K18	2022	Consider offering training courses in using plain language.	7	6	2	
K19	2022	Prepare written guidelines for how the production of statistics should be carried out.	6	2	0	
K20	2022	Guidelines for how statistics should be produced are published on the statistics authorities' websites, or links are provided to guidelines on ssb.no.	6	4	1	
K21	2022	Where applicable, discontinue data capture by email and replace it with a secure solution, such as file transfer.	6	2	0	
K22	2022	Collect and share best practices in new technologies and new data sources among producers of official statistics.	4	3	0	
K23	2022	Producers who do not have established forums for contact with users should consider establishing user councils or something similar. Conducting a user and stakeholder analysis can be a useful tool in this work.	1	0	0	
K24	2022	Producers who collect data for official statistics voluntarily, and who have experienced non-response leading to reduced accuracy, should explore the possibility of making participation in the survey mandatory.	1	1	1	Completed 2025
K25	2022	Producers should review the process for publishing preliminary statistics for all official statistics. The review should aim to establish common guidelines for all official statistics.	4	3	2	
K26	2022	Some producers should analyse the difference between preliminary and final statistics. Based on the analysis, the need for preliminary statistics can be evaluated.	5	2	1	
K27	2022	Statistics Norway should develop a quality indicator for timeliness in official statistics.	3	3	0	Completed 2024
K28	2022	Producers whose statistics include variables that are not comparable with corresponding variables in other Norwegian statistics or who are unsure whether they are comparable with similar statistics in other countries, should investigate whether they can improve comparability, or possibly explain to users why comparison is difficult.	1	1	0	
K29	2022	All producers should draw up written guidelines for publishing statistics.	1	1	0	
K30	2022	All producers must ensure that the guidelines for publishing statistics are accessible on their websites. These may be guidelines drawn up by the producers themselves or the principles in the European Statistics Code of Practice, available on ssb.no.	3	3	1	
K31	2022	Statistics Norway holds a themed meeting in the methodology network on the dissemination of official statistics and graphics as a tool.	1	1	0	Completed 2023
K32	2022	Producers who do not offer customised analyses for clients are encouraged to consider doing so.	0	0	0	
K33 ¹²	2022	Customised analyses that may be relevant to the general public should be published on the producer's website or in a public record.	4	3	1	
K34	2022	Statistics Norway should offer a course in quality work that covers the European Statistics Code of Practice and the Generic Statistical Business Process Model (GSBPM).	1	1	0	Completed 2023

¹² Recommendation K33 from 2022 has been clarified.

Recom- men- dation no.	Recom- men- dation given, year	Recommendation	No. of measures	No. of measures impleme- nted as of Feb. 2025	Of which impleme- nted Jan.-Feb. 25	Status
K35	2022	Statistics Norway should devise a plan for quality reviews of official statistics which ensures that all producers can participate in a quality review during a programme period. All producers are encouraged to participate in a quality review at another producer.	3	2	0	Completed 2023
K36	2022	Statistics Norway should compile a collection of best practices with guidelines and make it available to the Committee for Official Statistics.	4	2	1	
K37 ¹³	2023	All producers of official statistics are encouraged to participate in networks, courses, seminars and meetings on quality in statistics held by Statistics Norway or others.	5	3	3	
K38 ¹⁴	2023	Statistics Norway raises the topic of professional independence in the Committee for Official Statistics or the methodology network.	1	0	0	
K39	2023	The issue of assigning responsibility for quality work is discussed in the Committee for Official Statistics.	1	0	0	
K40	2023	When the efforts in information security are discussed in the Committee for Official Statistics, the producers of official statistics are invited to present their experiences.	1	1	1	Completed 2025
K41	2023	All producers adopt Statistics Norway's timeliness indicator: the number of days between the end of the statistics' reference period and publication of the statistics.	5	2	1	
K42	2023	All the producers of official statistics initiate work on assessing relevant quality indicators for selected statistics.	6	0	0	
K43	2023	Producers should conduct regular surveys to measure user satisfaction with the statistics.	2	0	0	
K44	2023	Producers should introduce a feedback function for the statistics on their websites.	3	1	1	
K45	2023	All producers are recommended to document statistics in line with SIMS, following Eurostat's recommendation.	4	1	1	Replaced by K67
K46	2024	It is recommended that Statistics Norway establish a clear and universal definition of the reference period used as a basis for calculating timeliness.	1	1	1	Completed 2025
K47	2024	A review of the reference period is needed for all statistics in accordance with the revised definition.	1	0	0	
K48	2024	For the KOSTRA statistics in Statistics Norway, it is recommended that an assessment is made of whether timeliness can be improved by allowing certain statistics to be published earlier or more frequently, based on a balance between timeliness and other quality objectives.	1	0	0	
K49	2024	It is recommended that enquiries about user needs received by the central support team be summarised and communicated to those responsible for the statistics.	2	1	1	
K50	2024	Improve the dissemination platforms and the tools for creating visual presentations to make it easier to publish different types of visualisations.	6	2	2	
K51	2024	Use different types of visualisations.	13	2	2	
K52	2024	Establish guidelines and build expertise in retrieving data directly from the IT systems of respondents or other data providers. One such example is machine-to-machine (M2M) communication.	2	0	0	

¹³ The wording of this recommendation has been revised somewhat.

¹⁴ The phrase "and responsibility for quality assurance work" has been deleted from the recommendation. This is covered by K39.

Recom- men- dation no.	Recom- men- dation given, year	Recommendation	No. of measures	No. of measures impleme- nted as of Feb. 2025	Of which impleme- nted Jan.-Feb. 25	Status
K53	2024	Statistics Norway: consider opening up the <i>Klass</i> coding system so that external producers of statistics can input their coding systems and classifications.	1	0	0	
K54	2024	Klass should be adopted where practical and appropriate.	6	4	4	
K55	2024	Explain uncertainty and potential sources of error on the statistics' home page.	9	0	0	
K56	2024	Where uncertainty is already calculated for statistics, consideration should be given to publishing this on the statistics' home page.	1	0	0	
K57	2024	Raising awareness and enhancing competence in understanding, calculating and communicating statistical uncertainty.	5	2	2	
K58	2024	Measure the effect of editing and assess whether the editing work can be reduced and/or concluded earlier, or if it is possible to improve the quality of input data. See quality indicator number 4 in the report on recommended quality indicators in official statistics (in Norwegian only, Notater 2024/5).	7	2	2	
K59	2024	Establish and improve guidelines for disclosure control and raise awareness of these with statistics producers.	2	1	1	
K60	2024	Adopt recognised software to ensure adequate statistical confidentiality.	2	1	1	Replaced by K65
K61	2024	Offer training in statistical confidentiality to everyone and make it compulsory for all new employees involved in statistics production and relevant support functions.	2	0	0	
K62	2024	Offer courses on quality to everyone and make it compulsory for all new employees in statistics production and relevant support functions.	2	1	1	Completed 2025
K63 ¹⁵	2024	Consider whether the quality reports can be further developed to better track quality over time and more easily adapt the report template as new needs arise.	1	0	0	
K64	2024	Standardise log data structures to facilitate the establishment of quality indicators.	2	0	0	
K65 ¹⁶	2025	Work to replace manual suppression and noise addition, and the use of own software for disclosure control, using recognised methods and software.	-	-	-	-
K66	2025	Finish the review of confidentiality in Statistics Norway's deliveries of microdata and follow up the results of this.	-	-	-	-
K67 ¹⁷	2025	All producers are recommended to adapt the user-oriented documentation of their statistics to Statistics Norway's template and guidelines for "About the statistics" and make this available on the statistics' website.	-	-	-	-
K68	2025	All producers are recommended to establish procedures and practice for assessing the updating of user-oriented documentation in connection with each publication.	-	-	-	-
K69	2025	Producers are recommended to familiarise themselves with Statistics Norway's principles for editing.	-	-	-	-

¹⁵ Recommendation K63 from 2024 has been clarified

¹⁶ K65 replaces previous recommendation K60 (2024): Adopt recognised software to ensure adequate statistical confidentiality.

¹⁷ K67 replaces three previous recommendations: K09. All producers should prepare written documentation on how the statistics are produced and keep the documentation up to date, K10. Documentation of the statistical production is published on the statistical authority's website, and K45. All producers are recommended to document statistics in line with SIMS, following Eurostat's recommendation.

Recom- men- dation no.	Recom- men- dation given, year	Recommendation	No. of measures No. of measures	No. of measures implemen- ted as of Feb. 2025	Of which implemen- ted Jan.-Feb. 25	Status
K70	2025	It is recommended that Statistics Norway monitor developments in the quality of statistics in connection with the transition to Dapla.	-	-	-	-
K71	2025	Expand Statistics Norway's methodology library through the addition of more methods for calculating uncertainty.	-	-	-	-
K72	2025	Statistics Norway's management regularly follows up on the indicator for punctuality.	-	-	-	-
K73	2025	Arrange a seminar with the theme of punctuality and timeliness for all producers of official statistics.	-	-	-	-
K74	2025	Producers should make official statistics visible to users and ensure that they are easy to find both by using search engines and on their website.	-	-	-	-
K75	2025	Statistics Norway should ensure that relevant employees are familiar with obligations and tasks in the cooperation with register owners and ensure active follow-up of the agreements.	-	-	-	-
K76	2025	Explore the development, funding and administration of common solutions across producers of official statistics, within the following domains: dissemination, metadata and documentation.	-	-	-	-
K77	2025	It is recommended that producers of official statistics adopt PxWeb and PxAPI to ensure the efficient, user-friendly and comprehensive dissemination of official statistics.	-	-	-	-
Total number of measures			228	119	51	-

Source: Statistics Norway

Appendix C: Quality requirements for official statistics

The quality requirements for official statistics are defined in the Statistics Act and the European Statistics Code of Practice.

Section 5 of the Statistics Act stipulates the following:

1. Official statistics shall be developed, produced and disseminated in a professionally independent, impartial, objective, reliable and cost-effective manner.
2. The development, production and dissemination of official statistics shall be based on uniform standards and harmonised methods. The statistics shall be relevant, accurate, timely, punctual, accessible and clear, comparable and coherent.

The requirements in the Statistics Act are in accordance with the European Statistics Code of Practice (Eurostat, 2017), to which the Norwegian statistical system is subject under the EEA Agreement. The Code of Practice sets requirements for institutional factors and statistical processes, statistical output, and is formulated as 16 principles with a range of underlying indicators:

Institutional factors (structure quality)

1. Professional independence
1. bis. Coordination and cooperation
2. Mandate for data collection and access to data
3. Adequacy of resources
4. Commitment to quality
5. Statistical confidentiality and data protection
6. Impartiality and objectivity

Statistical processes (process quality)

7. Sound methodology
8. Appropriate statistical procedures
9. Non-excessive burden on respondents
10. Cost effectiveness

Statistical output (output quality)

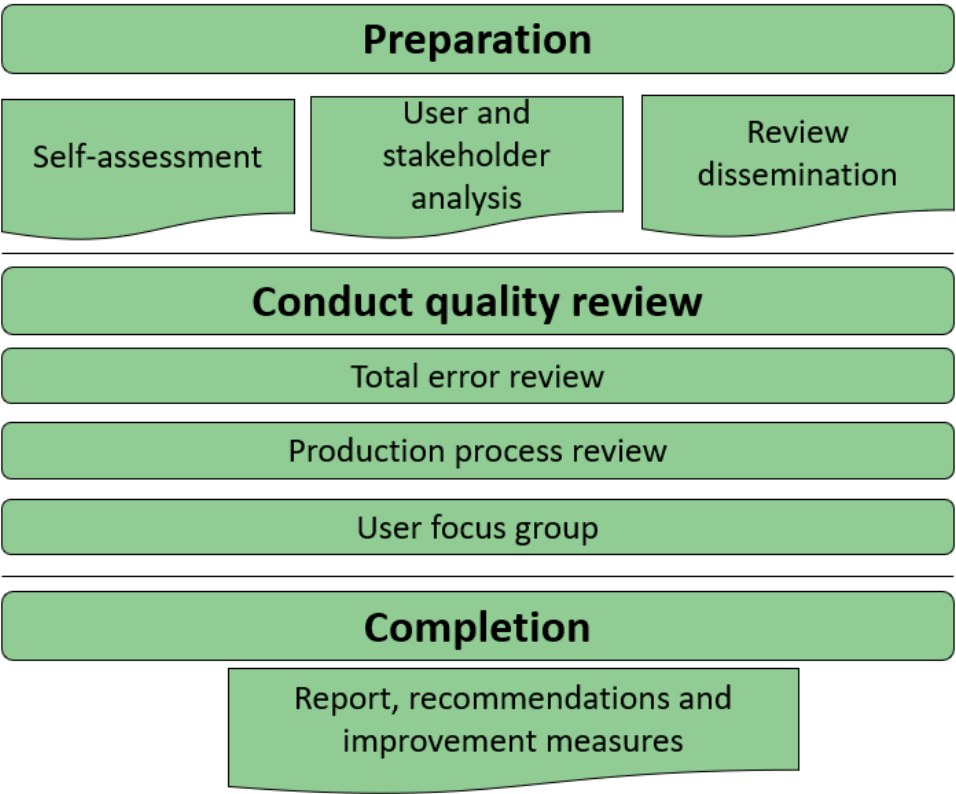
11. Relevance
12. Accuracy and reliability
13. Timeliness and punctuality
14. Coherence and comparability
15. Accessibility and clarity

Appendix D: Quality review framework

A quality review consists of the following activities:

- Statisticians perform a self-assessment based on the European Statistics Code of Practice.
- Statisticians perform a user and stakeholder analysis.
- Review of the dissemination of statistics on the website and in other media.
- Review of potential sources of error in population and data, assess data quality, based on the total error framework, the TF model, (Zhang, 2012).
- Review of the production process based on the process model GSBPM (UNECE 2019).
- Focus group (group discussion) with some users of the statistics, focusing on the quality principles for statistical output.
- Report from the quality review with recommended improvements from the quality team and an action list from the statistician.
- Annual status report on actions.

Figure D1 The stages in a quality review



Source: Statistics Norway