



EUROPEAN
STATISTICAL
SYSTEM

**IMPROVEMENT ACTIONS
THE NETHERLANDS**



**PEER REVIEWERS' RECOMMENDATIONS AND
IMPROVEMENT ACTIONS OF THE NATIONAL STATISTICAL
SYSTEM OF THE KINGDOM OF THE NETHERLANDS IN
RESPONSE TO THE RECOMMENDATIONS**

1. Recommendation

The Advisory Council should reflect upon the process related to the appointment and dismissal of the Director General with the goal of refining the procedures in order to strengthen the institutional stability and making the process more transparent. (Improvement-related: ES CoP, Indicator 1.8)

Current situation:

The provisions for the appointment and dismissal of the Director-General of Statistics Netherlands are stated in the Statistics Netherlands Act (Wet op het CBS). When the position of Director-General becomes vacant, the Advisory Council ("Raad van Advies") shall make a recommendation for filling the position to the Minister of Economic Affairs and Climate (Min. EZK). The Director-General may only be suspended or dismissed by the Minister of Economic Affairs and Climate in consultation with the Advisory Council. The provisions for the appointment of the Director-General are included in the Rules of the Board (het "Bestuursreglement"): the Advisory Council shall draw up a profile, select candidates on the basis of a procedure that is transparent and solely based on professional criteria, and make a recommendation to the Minister of Economic Affairs and Climate. Provisions and the procedure for the suspension or dismissal of the Director-General are not yet elaborated. In case such provisions and procedures are developed by Statistics Netherlands and provided to the Advisory Council, it has to be noted that the NSI can only provide recommendations to its Advisory Board and its responsible Minister, the latter has the discretion to change the actual legal and policy framework.

Improvement sub-action 1.1: Document the investigation of the procedure for the appointment of the Director-General with the goal of identifying whether it can be strengthened

Deadline: Q1 2023

Responsible institutions for improvement sub-action 1.1: Statistics Netherlands, Advisory Council, Ministry of Economic Affairs and Climate

Improvement sub-action 1.2: Document the reflection about the current legal framework regarding the procedure of dismissal/suspension of the Director-General.

Deadline: Q3 2023

Responsible institution for improvement sub-action 1.2: Statistics Netherlands

Improvement sub-action 1.3: Drafting an advisory document containing recommendations on the possible provisions for dismissal/suspension of the Director-General. A subsequent decision on the endorsement of the advice may be taken by the Advisory Council.

Deadline: Q4 2023

Responsible institutions for improvement sub-action 1.3: Statistics Netherlands, Advisory Council.

2. Recommendation

Statistics Netherlands should intensify its efforts to gain access to privately held data and start a campaign of user consultations on the benefits of its use and on privacy-related issues in order to obtain the "social license" for the use of new data sources. (Improvement-related: ES CoP, Indicator 2.4).

Current situation:

Statistics Netherlands recognizes the potential of using privately held data for statistical purposes and has already implemented many activities related to their integration into statistical products. In this context, Statistics Netherlands mentioned the concept of "social licensing", meaning that with support at the level of society, it will be easier to convince suppliers of information, as well as legislators to grant access to privately held data to Statistics Netherlands. To obtain such social license, Statistics Netherlands should start a campaign of user consultations and awareness-raising activities on the benefits of accessing and using privately held data.

Improvement sub-action 2.1: CBS will include the issue of obtaining access to privately held data in the multi-annual programme ("MJP") that CBS presents to the Ministry of Economic Affairs and Climate in November 2022. More specifically, CBS describes the priority to access data on public transportation (OV), smart energy meters, test and vaccination data (COVID-19), data on energy contracts and mobile network data. This will ensure political backing for the social license needed to address the parties that hold data in the private sector.

Deadline: Q4 2022

Responsible institution for improvement sub-action 2.1: Statistics Netherlands

Improvement sub-action 2.2: CBS will develop and execute a communication strategy to inform people directly affected, other stakeholders and the general public about the intended use of privately held data for statistical purposes. In addition, CBS will continue its efforts towards the suppliers of the information, to convince them of the importance of their cooperation.

Deadline: Q4 2023

Responsible institution for improvement sub-action 2.2: Statistics Netherlands

Improvement sub-action 2.3: CBS will support the implementation of the Data Governance Act and the Data Act in the Netherlands by engaging in conversations with the Ministry of Internal Affairs (BZK) on whether CBS should have an active role in the acts. Both will provide opportunities to catalogue privately held data, contact the organizations that hold the data, provide a legal structure to negotiate the access to privately held data as well as use privately held data for statistical purposes by CBS. It is expected these developments require a multi-year implementation, with the first milestone regarding the definition of the expected role and responsibilities of the NSI expected in Q4 2024.

Deadline: Q4 2024

Responsible institution for improvement sub-action 2.3: Statistics Netherlands

3. Recommendation

Statistics Netherlands should continue developing its active human resource management, expand its efforts to inform all staff about their career development possibilities and devise measures to promote internal staff mobility and keep Statistics Netherlands attractive for high-potential employees. (Improvement-related: ES CoP, Indicator 3.1).

Current Situation:

In 2020, Statistics Netherlands adopted a Human Resource Strategy aimed at hiring people with the right skills and competences, creating a facility for staff training (CBS Academy) and at strengthening and modernising its Human Resource management, in order to face upcoming challenges.

Improvement sub-action 3.1: Developing new tools for career development and internal staff mobility. Based on the direction chosen in the Multi-Annual Programme in the field of career and development, new policies and tools on these subjects are developed and placed on the 'CBS Development Plaza' (on our Intranet). This Plaza is the place where employees can find all procedures and HR instruments regarding career development and internal staff mobility, such as a tool called 'Exercises' ('Oefeningen' in dutch) with which employees can prepare themselves for their next step within the organization, the career path possibilities ('Ontwikkellijnen' in dutch) within a given type of function (e.g Statistical researcher, IT Software developer) in the organization.

Deadline: Q4 2023

Responsible institution for improvement sub-action 3.1: Statistics Netherlands

Improvement sub-action 3.2: Informing staff about career development and internal staff mobility. A communication strategy will be drawn up to keep employees informed of developments and (new) opportunities at the CBS Development Plaza.

Deadline: Q4 2023

Responsible institution for improvement sub-action 3.2: Statistics Netherlands

4. Recommendation

Statistics Netherlands should consider integrating the basic courses of the Central Bureau of Statistics Academy into the regular on-boarding process, including comprehensive training on the general aspects of European statistics and the European Statistical System quality framework. (Improvement-related: ES CoP, Indicators 3.1 and 7.1).

Current situation:

In 2022 a project was initiated to totally renew the CBS on-boarding programme. In Q4 2022 a first pilot was carried out to test a new possible setup. Adjustments had to be made because CBS no longer wants to do the on-boarding programme online, and more importantly, the current onboarding process is no longer adjusted to the young new employees that CBS is recruiting.

Even though the overall training system seems to work efficiently, benefits could be achieved through a closer integration of staff education with the on-boarding process. With regard to all staff, a training on the general aspects of European statistics and the ESS quality framework would be contributing to a more efficient production of European Statistics and other statistics.

<p>Improvement action 4: All on-boarding modules will be reviewed and updated. Some modules may be integrated, expanded or adjusted based on professional experience and user feedback. More specifically, CBS will offer a series of modules for new hires that will include a module (lecture) on the European Statistical System, an introduction to the work of CBS International team and an in-depth module on the European Statistical System through the CBS Academy. Furthermore, the entire process of onboarding will be digitally supported by the Personnel Information System Casper (AFAS) through which the CBS Academy modules are offered to all staff. CBS will continue to expand and update its offered courses in the Academy.</p>
<p>Deadline: Q2 2023</p>
<p>Responsible institution for the improvement action 4: Statistics Netherlands</p>

<p>5. Recommendation</p> <p>Statistics Netherlands should develop a comprehensive metadata system that can provide a coherent overview of all Statistics Netherlands' metadata. (Improvement-related: ES CoP, Indicators 15.1, 15.5, 15.6 and 15.7)</p>
<p>Current situation:</p> <p>Statistics Netherlands has a comprehensive quality framework based on international standards like ISO 9001, ISO27001 etc. A comprehensive and coherent metadata system does not seem to be a part of this quality framework. This could explain the lack of coherent metadata that was identified by the peer review team. Some users expressed a lack of complete metadata for the statistics/data they use but were well helped by staff at Statistics Netherlands. CBS already has a comprehensive metadata standard, as well as a metadata system. However, not all microdata is recorded in this system. Although a harmonized statistical overview of data concerning persons is in place, many economic datasets are not yet integrated in the system.</p>
<p>Improvement sub-action 5.1: CBS will continue to add datasets to the metadata system.</p>
<p>Deadline: Q4 2023</p>
<p>Responsible institution for improvement sub-action 5.1: Statistics Netherlands</p>
<p>Improvement sub-action 5.2: CBS will investigate the functional needs for a new metadata management system that will make it easier to store, handle and use metadata.</p>
<p>Deadline: Q4 2023</p>
<p>Responsible institution for improvement sub-action 5.2: Statistics Netherlands</p>
<p>Improvement sub-action 5.3: CBS will cooperate on the metadata management system with the scientific and international community that already has implemented international standards. After investigating the functional needs, CBS will implement the new metadata management system as described in the data strategy.</p>
<p>Deadline: Q4 2027</p>
<p>Responsible institution for improvement sub-action 5.3: Statistics Netherlands</p>
<p>Improvement sub-action 5.4: CBS will continue implementing the classification system throughout all statistical processes.</p>

Deadline: Q4 2023
Responsible institution for improvement sub-action 5.4: Statistics Netherlands
Improvement sub-action 5.5: CBS will upgrade its current central storage system for microdata to better support the metadata management system and provide tools such as searching metadata and providing access to the data.
Deadline: Q4 2023
Responsible institution for improvement sub-action 5.5: Statistics Netherlands

6. Recommendation
Statistics Netherlands should implement the Single Integrated Metadata Structure as the basis for quality reporting to promote efficient and harmonised reporting at national, European and international levels. Quality reporting should be available both in Dutch and English. (Improvement-related: ES CoP, Indicators 15.1, 15.5, 15.6 and 15.7).
Current situation:
As most European statistics require some form of quality reporting, it would be efficient and helpful if the Single Integrated Metadata Structure could become the basis for quality reporting in Statistics Netherlands. In this way, all quality reporting could be enhanced by using the Single Integrated Metadata Structure in one common metadata system, with the possibility of selecting relevant fields needed for different reporting obligations. This may lead to a reduced overall documentation burden for statistical producers and coherent reporting to both international and national users.
Improvement sub-action 6.1: CBS will define those statistical domains for which quality reports in Dutch and English are obligatory and appropriate and publish those.
Deadline: Q1 2025
Responsible institution for improvement sub-action 6.1: Statistics Netherlands
Improvement sub-action 6.2: CBS is aware of the Commission recommendation on the use of SIMS and SIMS as the ESS standard to be implemented for all European statistics transmitted to Eurostat. CBS will prepare an inventory of the domains already using SIMS.
Deadline: Q2 2025
Responsible institution for improvement sub-action 6.2: Statistics Netherlands
Improvement sub-action 6.3: CBS will work towards a metadata management system that will enable CBS to comply with the use of SIMS as the ESS standard.
Deadline: Q4 2027
Responsible institution for improvement sub-action 6.3: Statistics Netherlands

7. Recommendation

Statistics Netherlands should build upon the idea of having a common tool for statistical staff and managers that can provide an overview of the steps in the production processes and measure performance in the production of statistical products. (Improvement-related: ES CoP, Indicators 8.3 and, 8.4).

Current situation:

Statistics Netherlands has a solid and comprehensive quality framework, and the quality awareness seems to be solid throughout the organisation. As different systems are used to keep an overview of the performance in the different productions systems, it could be beneficial to have one common system where the statistical processes are described, followed by the staff and their managers and which could be used throughout the organisation. This could be helpful and prove efficient to keep both an overview of the statistical processes, but also to track the performance of the processes recording key performance indicators for the statistical production. A common system could also be beneficial for mobility within Statistics Netherlands.

Improvement sub-action 7.1: Describe and analyse existing tools. The two statistical divisions will map out which tools are used to learn from each other about the tools used. The quality working groups of the divisions, in consultation with the Chief Quality Officer, will briefly describe each tool.

Deadline: Q2 2023

Responsible institution for improvement sub-action 7.1: Statistics Netherlands

Improvement sub-action 7.2: Joint advice and proposal on usefulness and necessity of standardised tools, and potential implementation.

Deadline: Q2 2023

Responsible institution for improvement sub-action 7.2: Statistics Netherlands

Improvement sub-action 7.3: Decision by the Board of Directors on standardised tools

Deadline: Q1 2024

Responsible institution for improvement sub-action 7.3: Statistics Netherlands

Improvement sub-action 7.4: If applicable: implementation of the decision by the Board of Directors about the standardized tool.

Deadline: Q2 2024

Responsible institution for improvement sub-action 7.4: Statistics Netherlands

8. Recommendation

Statistics Netherlands should review its pre-release access policy, which conflicts with the principle of impartiality. If pre-release access is to be retained, Statistics Netherlands should reduce the duration of pre-release access times, review the mode of access and increase the transparency of the criteria behind individual decisions. (Compliance-relevant: ES CoP, Indicator 6.7).

Current situation:

Statistics Netherlands provides privileged pre-release access to statistical releases to a wide range of government institutions and media. Pre-release access is not granted for stock market-sensitive information (with the exception of quarterly economic growth, for which pre-release access is granted to selected government institutions). All users enjoying pre-release access are listed on the Statistics Netherlands website along with the statistical releases concerned. However, the number of pre-releases is high and pre-release access is granted up to 24 hours in advance. Even though privileged users are satisfied with the ability to prepare in advance, the peer review team noted that the pre-release access to statistical releases is in conflict with the principle of impartiality, as defined by the Regulation (EU) 223/2009 on European statistics and in the ES CoP. Considering that statistical authorities have to ensure that the production and dissemination of European statistics is objective and transparent and that all users are treated equitably and have equal access to statistical releases at the same time, the peer review team sees a need to take measures aimed at ensuring compliance with the ES CoP by thoroughly reviewing Statistics Netherlands' pre-release access policy. If pre-release access is retained - tightening the rules and arrangements and reducing the privileged pre-release access times to statistical results will transparently demonstrate that the dissemination of European statistics is impartial.

CBS will reconsider the strengths and weaknesses of its pre-release access policy and strengthen the rules regarding pre-release based on the suggested criteria. CBS will differentiate its pre-release policy between pre-releases for media and pre-releases for institutions (mainly government institutions). Most of the improvement actions will concern the institutional pre-release. In some cases, the media pre-release is also affected.

Improvement sub-action 8.1: CBS will reduce the standard pre-release time by providing a standard pre-release timeslot at 12:00 (noon) on the working day before release for eligible institutions.

Deadline: Q2 2023

Responsible institution for improvement sub-action 8.1: Statistics Netherlands

Improvement sub-action 8.2: CBS will update (clarify and tighten) the rules and regulation on which institutions may receive pre-release. Clear policy to be formulated regarding the considerations on granting pre-release and what process to follow. Pre-release will be sent to specific persons within the organisations.

Deadline: Q2 2023

Responsible institution for improvement sub-action 8.2: Statistics Netherlands

Improvement sub-action 8.3: CBS will review the mode of access. Specifically, CBS will explore if pre-release access can be made available through a secure channel.

Deadline: Q4 2024

Responsible institution for improvement sub-action 8.3: Statistics Netherlands

Improvement sub-action 8.4: CBS will provide a higher degree of transparency on which institutions receive which pre-releases and based on which criteria.
Deadline: Q2 2023
Responsible institution for improvement sub-action 8.4: Statistics Netherlands
Improvement sub-action 8.5: The pre-release policy and the transparency of pre-release dispensations for both media and institutions must be regularly reviewed. Criteria will be established which can be used in the monitoring and review cycle.
Deadline: Q2 2024
Responsible institution for improvement sub-action 8.5: Statistics Netherlands
Improvement sub-action 8.6: Implementation and communication about the new policy to ensure familiarity and compliance with new procedures.
Deadline: Q4 2023
Responsible institution for improvement sub-action 8.6: Statistics Netherlands

9. Recommendation
Statistics Netherlands should review its publication policy to improve the predictability of release times and reduce the number of possible daily release times. (Improvement-related: ES CoP, Indicator 6.5)
Current situation: Statistical release dates and times are to be pre-announced. A release calendar should be publicly available and easily accessible to make sure that users are informed in advance. This principle leads to a situation, where the release dates are predictable and transparent. One element to achieve this principle is a limitation of the release times during the day. One release time can easily be remembered by users. Currently there are multiple release times in Statistics Netherlands: 6:30 for stock-exchange sensitive releases, 9:30 for press-releases, 12:30 for corporate articles, 15:30 for Caribbean, as well as releases at midnight with the goal that latest information can be included in the morning newspapers. The release times are carefully chosen and have a predictable character for different grounds and target groups. The chosen release dates are always valid in the given moment in time and should be reviewed from time to time in a fast-changing environment, with social media and a changing importance of morning newspapers. Therefore, Statistics Netherlands should review its publication policy of release times and possibly reduce the number of daily release times.
Improvement sub-action 9.1: Review number of daily release times and identify whether a reduction is possible.
Deadline: Q4 2024
Responsible institution for improvement sub-action 9.1: Statistics Netherlands
Improvement sub-action 9.2: Announce adjustments in time and provide explanations tailored to the main target groups for the release time adjustment in question.
Deadline: Q4 2024
Responsible institution for improvement sub-action 9.2: Statistics Netherland

10. Recommendation

Statistics Netherlands should redesign its release calendar to provide information on the changes in publication dates and reasons for each deviation. (Compliance-relevant: ES CoP, Indicator 13.4).

Current situation:

Statistics Netherlands maintains a publication calendar of releases on its website. The calendar is defined in advance before the beginning of the statistical year, but also updated every Friday for the forthcoming period. The calendar is not interactive and does not provide information about the timings of past releases. The peer review team also noted that in cases of divergence from the dissemination time schedule, the publication calendar does not provide information about the previous release dates and only the new date is available to the public, without additional explanations. To ensure compliance with the ES CoP, divergence from the dissemination time schedule should be publicised in advance, explained and a new release date set. Users should also be able to track divergences according to the statistical area and the responsible producer. The peer review team therefore recommends that Statistics Netherlands redesigns its publication calendar and produce information on changes of publication dates, containing explanations of the reasons for each deviation from the previous schedule.

Improvement sub-action 10.1: Research will be carried out on the possibilities and available financing of making schedule changes in the release calendar visible on the website with the existing systems and available IT-manpower.

Deadline: Q4 2024

Responsible institution for improvement sub-action 10.1: Statistics Netherlands

Improvement sub-action 10.2: Choice of most feasible solution

Deadline: Q4 2024

Responsible institution for improvement sub-action 10.2: Statistics Netherlands

Improvement sub-action 10.3: Implementation of the chosen solution

Deadline: Q4 2024

Responsible institution for improvement sub-action 10.3: Statistics Netherlands

11. Recommendation

Statistics Netherlands should review its release calendar with the aim of creating a single release calendar guaranteeing equal access for all users. (Improvement-related: ES CoP, Indicator 6.5)

Current situation:

Statistics Netherlands' release calendar currently provides incomplete information to English-speaking users. The English publication calendar shows a limited number of releases as it includes only those that are translated from Dutch to English. Release time of English releases is 15:00, which is significantly later than the Dutch-language based releases. As according to the Regulation (EU) 223/2009 on European statistics all users should be treated equally, the peer review team suggests that all releases (both Dutch and English) are integrated in a single release calendar, which will contain information on all publications regardless of the language.

Improvement sub-action 11.1: Investigation of the possibilities of translating the integral release calendar (Dutch and English) and highlighting the publications to be translated.

Deadline: Q4 2024

Responsible institution for improvement sub-action 11.1: Statistics Netherlands

Improvement sub-action 11.2: Selection of a suitable method for an integrated release calendar.

Deadline: Q4 2024

Responsible institution for improvement sub-action 11.2: Statistics Netherlands.

Improvement sub-action 11.3: Implementation of the integrated release calendar

Deadline: Q4 2024

Responsible institution for improvement sub-action 11.3: Statistics Netherlands

12. Recommendation

Statistics Netherlands should develop a strategy aimed at identifying and reaching new user groups in order to engage broader layers of society. (Improvement-related: ES CoP, Indicator 11.1).

Current situation:

The Statistics Netherlands Act provides that Statistics Netherlands delivers statistical information “which meets the needs of practice, policy and science” (Sections 3 and Section 15.3). This provision refers to the ES CoP, which states that statistics “serve the needs of European institutions, governments, research institutions, business concerns and the public generally”, and especially its principle 11 on Relevance. Statistics Netherlands has an active communication unit and strong relations with media and other central users that could be characterised as “power users”. Needs of the users are frequently addressed through various formal and informal consultations, direct relations between Statistics Netherlands’ directorates or services and users of their statistics.

Attention paid by Statistics Netherlands to meet user needs appears in the various ways it communicates information, beyond traditional figures and reports: visualisation, fact sheets, open data, interactive tools and dashboards make statistics more user friendly and capable to reach larger groups of the population.

In 2021, Statistics Netherlands launched 'Leren met het CBS'. Learning with Statistics Netherlands offers material for primary and secondary school pupils and students to learn what data and statistics mean in our society. Notwithstanding the strong interest of the communities involved, primarily universities, media and economic partners, statistical literacy education programmes and the active development of a communication policy, the peer review team supports Statistics Netherlands’ agenda to reach out to users that have so far been somewhat unreached. This should include steps to engage groups of society beyond the traditional users, and to anticipate emerging needs and priorities. Broadening its users’ engagement could potentially generate more societal support for Statistics Netherlands’ activities.

Improvement sub-action 12.1: Following a recently conducted image survey, determine which target groups can be better reached on digital communication channels.

Deadline: Q4 2024

Responsible institution for improvement sub-action 12.1: Statistics Netherlands

Improvement sub-action 12.2: Investigate ways to increase the reach of target groups on digital communication channels and define a strategy.

Deadline: Q4 2024

Responsible institution for improvement sub-action 12.2: Statistics Netherlands

Improvement sub-action 12.3: Implementation of the chosen strategy.

Deadline: Q4 2024

Responsible institution for improvement sub-action 12.3: Statistics Netherlands

13. Recommendation

Statistics Netherlands should reconsider its approach towards communicating privacy-related issues, by making the confidentiality-related messages easy to understand, with all additional information readily available. (Improvement-related: ES CoP, Indicator 5.4).

Current situation:

As a consequence of the introduction of the EU regulation on General Data Protection (GDPR), national statistical institutes throughout the EU face an increased awareness on privacy related issues from respondents and users. Even though this coincided with reduced response rates, the peer review team noted the importance of proactive communication on issues related to statistical confidentiality. Statistical confidentiality is a complex issue, and Statistics Netherlands should reconsider its approach towards communicating privacy related issues by making the messages related to confidentiality layered, easy to read and understand with additional information readily available.

Improvement sub-action 13.1: The Privacy page on the (CBS) website will be renewed. The pages on innovation and microdata services are currently being redesigned. The idea is to reuse the same Microdata services setup for the privacy page. The page will become clearer with better references to various privacy topics that are frequently asked questions. All texts will be updated and written for a broad audience. The page will also be available in English.

Deadline: Q4 2024

Responsible institution for improvement sub-action 13.1: Statistics Netherlands

Improvement sub-action 13.2: Statistics Netherlands will set up an internal privacy page with relevant information that can be used by employees as a resource and knowledge base regarding privacy. The latter is outside the scope of the peer review, but does form an integral part of the ambition to disclose privacy-related information.

Deadline: Q4 2024

Responsible institution for improvement sub-action 13.2: Statistics Netherlands

14. Recommendation

Statistics Netherlands should continue its efforts to improve the system for microdata remote access in order to improve its level of service, while preserving confidentiality and the availability of data. (Improvement-related: ES CoP, Indicators 5.6 and 15.4).

Current situation:

Statistics Netherlands has an advanced system for microdata access that includes many datasets and is a valuable asset for researchers. Even though the cost of microdata access is borne by the researcher, costs can be easily predicted as a microdata service catalogue is available at the Statistics Netherlands website. Statistics Netherlands plans to explore new approaches related to simplifying the procedures applicable to output checking and automating parts of the process.

Users of the remote access microdata environment communicate with CBS staff by email or by phone. E.g. for requests and information. This is not a very user-friendly way of interacting and it is not an efficient method for CBS staff. Also due to the increasing demand for CBS services, the risk increases that internal processes will be delayed. Starting in summer 2022, CBS has started redesigning the internal processes and designing a self-service portal. By the end of 2023 users will be able to inspect the status of their project online, make requests such as new data or new researchers online using the self-service portal, which acts as the new front end. By replacing Outlook for most of the communication by a new back-end system, CBS will be able to work more efficiently, thus improving the user experience.

Performance of the IT systems used in the remote access microdata environment is decreasing. Servers sometimes slow down due to memory shortage and the speed of the servers does not match the speed required given modern software, scripts and increasing size of (big) data. Starting in 2022, CBS has set up a new environment with more and stronger servers and increased memory. From October 2022, users will migrate to the new environment. This will enhance performance and thus improve user experience for all users by January 2023.

Output is being checked manually for disclosure of confidential data before it is released to be used outside the remote access microdata environment. The number of outputs that need to be checked is increasing but available capacity dedicated to output checks is not. The risk is that CBS staff cannot meet the deadlines and the quality of their work decreases, which could lead to inconsistencies and delays in delivering output that has no risk for disclosure. Starting from 2022, CBS will experiment with automatically checking outputs with a certain format (using a template) for disclosure. Checking complete outputs and all types of output automatically is probably not doable, therefore CBS tries to increase the functionality incrementally. By 2023, this tool will also be made available for researchers, so they can check their output beforehand. Thus, they will be more in control of the process of preparing output.

Improvement sub-action 14.1: Improving system and service level for remote access to microdata and automate output check by Migrating to VMWare.

Deadline: Q1 2023

Responsible institution for improvement sub-action 14.1: Statistics Netherlands

Improvement sub-action 14.2: Redesign the internal processes and introduce a self-service portal.

Deadline: Q4 2024

Responsible institution for improvement sub-action 14.2: Statistics Netherlands

Improvement sub-action 14.3: Automate the process of checking output for disclosure of confidential information.

Deadline: Q4 2024

Responsible institution for improvement sub-action 14.3: Statistics Netherlands