



# **IMPROVEMENT ACTIONS ESTONIA**

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• • • **STATISTICS**  
• • • **ESTONIA**

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

## 1. Recommendation

The Government should increase budgetary funding for Statistics Estonia in the light of new activities and to avoid the institution having to cut back on its work programme and on output quality – even though some relief could also come from internal efficiencies and additional resources outside the main budget. (Improvement related: ES CoP, Indicator 3.1)

### Current situation:

For years, the budget of Statistics Estonia has not kept up with organisation's additional activities related to its role in the national data governance system, additional statistical demands arising from the EU legislation and national interests, and internal modernisation efforts in areas such as communication, data collection and data processing. In 2021, Statistics Estonia redesigned its cost model so that the production costs according to the stages of the GSBPM are allocated to statistical domains.

For years, Statistics Estonia has been struggling to synchronise the demand arising from the needs for additional statistical output and analytical work with the current budgetary process. It is an ongoing effort to align implementation of EU statistical legislation with the national budgetary process. This has led to an increasing gap between user needs for statistical output and Statistics Estonia's capacity to meet that demand over the past 5 years.

To overcome the abovementioned challenge, Statistics Estonia has developed a procedure on how costs to implement the new EU legislation and new national needs are taken into account for budgetary allocations. This procedure has been introduced to the relevant ministries and the Ministry of Finance. Statistics Estonia has followed this procedure with new EU legislation and new national needs, so that we could refer to the procedure to negotiate and agree on how the costs are covered. This procedure has been welcomed by other government sector stakeholders whose activities are affected by the new legislation as we cooperate with them to include their needs into the procedure.

**Improvement sub-action 1.1:** Statistics Estonia proposes a sustainable and transparent funding model for the institution to the Statistical Council and the Ministry of Finance.

**Deadline:** Q4 2025

**Responsible institution for improvement sub-action 1.1:** Statistics Estonia

**Improvement sub-action 1.2:** Statistics Estonia will make the cost model more transparent, allocating costs throughout the production cycle for each statistical domain to be able to assess the need for additional resources according to the changes in five-year work programme (also referred to as the work programme).

**Deadline:** Q4 2025

**Responsible institution for improvement sub-action 1.2:** Statistics Estonia

**Improvement sub-action 1.3:** Statistics Estonia develops a framework based on the funding and the cost models and on a thorough analysis of the current and future cost for statistics production, as well as for data governance tasks aimed at transparency and sustainability in carrying out Statistics Estonia's activities in accordance with the provisions of the law. Statistics Estonia proposes this framework to the Statistical Council and the Ministry of Finance.

**Deadline:** Q3 2025

**Responsible institution for improvement sub-action 1.3:** Statistics Estonia

**Improvement sub-action 1.4:** The Statistical Council and the Ministry of Finance discuss the framework and decide upon its adoption and the next steps to ensure transparent and sustainable funding of the tasks related to the statistics production and data governance as

required by the law.
<b>Deadline:</b> Q4 2025
<b>Responsible institution for improvement sub-action 1.4:</b> Statistical Council and Ministry of Finance
<b>Improvement sub-action 1.5:</b> Statistics Estonia will increase its efficiency by defining the necessary resources, roles and responsibilities for data services, using the cost model to look for efficiency gains in the different stages of the GSBPM. Also, Statistics Estonia establishes a time management system for the data services and a management system based on data services. Statistics Estonia will increase automated processing of new data sources to benefit from efficiency gains.
<b>Deadline:</b> Q4 2026
<b>Responsible institution for improvement sub-action 1.5:</b> Statistics Estonia

## 2. Recommendation

Contingent on available funding, Statistics Estonia should adjust salary levels for staff categories that are difficult to attract and retain. (Improvement related: ES CoP, Indicators 3.1 and 7.5)

### Current situation:

Salary levels at Statistics Estonia are generally lower than the median for similar posts in the public or private sector, and for some categories of staff, notably those with high-level skills in analysis and data science, recruitment and retention pose serious challenges. Among the factors that have put and are putting pressure on the funding of Statistics Estonia are new activities related to its role in data governance, additional statistical demands arising from EU legislation, and internal modernisation efforts in areas such as communication, data collection and data processing. For example, the recruitment for national accounts analysts has been unsuccessful three times since 2021, due to low salary levels and a specific set of competencies for the needed staff.

The Estonian Ministry of Finance is responsible for the public sector salary policy development in Estonia. Standard activities, such as statistical analysis for salary expense and annual compensation surveys, are managed by the Ministry. Statistics Estonia takes part in annual public sector compensation surveys containing data of almost 30 000 employees and 119 public sector organisations led by the Ministry of Finance. The annual survey results give a comprehensive overview of the public sector's salaries while covering the classification of approximately 90 job positions according to their complexity and level of responsibility. The survey also provides a detailed analysis and overview of Statistics Estonia's positioning in the salary market and data for further analysis, which Statistics Estonia already uses – including job positions of analysts, data scientists, etc.

Furthermore, the Ministry of Finance's annual disclosure of civil servant salaries gives to Statistics Estonia a comprehensive and personified overview of competitive salaries for crucial staff positions. It provides the possibility to compare same-level salaries in different public sector organisations.

All available internal resources resulting from achieving efficiencies in the costs of activity are directed to improving the salary levels of staff groups critical for statistics production. The results will be observable in the rise in the average salary and decreasing turnover rate. According to the recent analyses of similar positions in private and public sector, Statistics Estonia's salaries for analysts are about 50% lower than the median market salary for these positions. In 2022, Statistics Estonia acquired additional funding from the state budget constituting nearly 30% of our annual budget to reduce the salary gap between Statistics Estonia's and market salary levels for corresponding positions.

**Improvement action 2:** Statistics Estonia will conduct a thorough analysis and redesign of the existing remuneration system together with the salary scale to ensure its compatibility with the labour market reality. Statistics Estonia will regularly assess the salary levels of the employees in relation to the dynamics in the labour market and adjust the salary levels of the key staff according to its financial capacities.

**Deadline:** Q4 2024

**Responsible institution for improvement action 2:** Statistics Estonia

### 3. Recommendation

The Government should consider ways to enhance the reputation of the Statistical Council in terms of its independence, e.g. by reconsidering its membership and responsibilities for its servicing. (Improvement related: ES CoP, Principle 1)

#### **Current situation:**

As foreseen in the Official Statistics Act, the Statistical Council contributes to fulfilling the purpose of official statistics by giving advice and delivering opinions to the producers of statistics (Statistics Estonia and Eesti Pank) and to the Ministry of Finance. The Statistical Council is set up by order of the Government of the Republic for a mandate of four years following the proposal of the minister responsible for the area. The role and the impact of the Statistical Council is not sufficient to create change, especially in the changing data ecosystem.

**Improvement sub-action 3.1:** Statistics Estonia makes a proposal to the Ministry of Finance to enhance the role and reputation of the Statistical Council. The possible changes could be a broader composition of the Council, changing / broadening the tasks of the Statistical Council, enhancing legal powers to govern the domain of official statistics, organisational changes etc.

**Deadline:** Q1 2025

**Responsible for improvement sub-action 3.1:** Statistics Estonia, Ministry of Finance

**Improvement sub-action 3.2:** The Ministry of Finance will decide on the appropriate changes and the steps to follow for its implementation in consultation with Statistics Estonia.

**Deadline:** Q1 2026

**Responsible for improvement sub-action 3.2:** Ministry of Finance, Statistics Estonia

**Improvement sub-action 3.3:** The Ministry of Finance and Statistics Estonia, cooperating jointly, will implement the appropriate alternative.

**Deadline:** Q3 2026

**Responsible for improvement sub-action 3.3:** Ministry of Finance, Statistics Estonia

### 4. Recommendation

The Government should consider ways of setting up the programme for official statistics that involve less direct influence from the political level, e.g. by devolving responsibility to the Statistics Council. (Improvement related: ES CoP, Principle 1)

**Current situation:**

Statistics Estonia prepares and presents the list of statistical activities specified in Official Statistics Act to the Ministry of Finance no later than by 1<sup>st</sup> of July each year. The programme includes the following data about statistical activities: 1) title; 2) legal basis; 3) statistical indicators; 4) periodicity; 5) reference period or moment; 6) estimated cost; 7) information on amendments planned to methodology. The list of statistical activities to be performed by Statistics Estonia are approved by an order of the Government of the Republic.

Several mechanisms are in place for Statistics Estonia to coordinate with government ministries. In addition to regular contacts at the expert level, a working group on national statistics was established (in April 2021) with the tasks of: (a) early monitoring of the sectoral statistical needs and creating awareness of the necessary phenomena and indicators; (b) prioritising among competing demands within the timetable for the development of legislation; and (c) agreeing on the need for national statistics to be included in the national budgetary strategy, with the aim of ensuring the necessary funding.

Statistics Estonia monitors the foreseen EU statistics obligations deriving from the new or amended EU legislation, assesses the need for additional resources for the next 5 years and includes them in the five-year work programme. Statistics Estonia also gathers the statistical needs deriving from national strategic planning in close bilateral consultations with the ministries and the Government Office. As European statistics covered by EU legislation constitute 93% of Statistics Estonia's budget, there is very little room for adding new national needs.

**Improvement sub-action 4.1:** The Ministry of Finance reviews the process of setting up the programme for official statistics and proposes amendments to the programming process to the Government.

**Deadline:** Q4 2024

**Responsible institution for improvement sub-action 4.1:** Ministry of Finance

**Improvement sub-action 4.2:** The review process and its results will be documented.

**Deadline:** Q1 2025

**Responsible institution for improvement sub-action 4.2:** Statistics Estonia

**5. Recommendation**

The Government, jointly with Statistics Estonia, should reflect on the administrative anchoring of Statistics Estonia in the light of potential effects on perceptions of professional independence and consider its role in whole-of-government data governance. (Improvement related: ES CoP, Principle 1)

<p><b>Current situation:</b></p> <p>Statistics Estonia is a governmental authority, which produces official statistics, coordinates data governance, leads the system of classifications, provides data sharing services and exercises state and administrative supervision. Statistics Estonia operates under the auspices of the Ministry of Finance. The responsibility for digital development of Estonia, including data governance lies with the Ministry of Economic Affairs and Communications. There are challenges in setting the strategy, tasks and allocation of budgetary resources for coordination of data governance. Statistics Estonia performs data governance activities according to the Estonian Digital Agenda 2030 in the project stated in the national recovery plan funded by the EU Recovery and Resilience Facility. Activities are carried out until 2025 according to the data management action plans created in cooperation with the Ministry of Economic Affairs and Communications and Statistics Estonia and are regularly updated. The focus is, for example, the promotion of data descriptions, increasing the data findability, audits facilitating data quality assurance, data interoperability support activities, data sharing service development etc. Statistics Estonia is seeking permanent funding for the sustainability of these activities.</p>
<p><b>Improvement sub-action 5.1:</b> Statistics Estonia presents a document with some options considered most efficient for the data governance set-up of Estonia for the roles of data governance between the Ministry of Finance and the Ministry of Economic Affairs and Communication. The clear and enforced position of Statistics Estonia as the data steward or as being responsible for data governance in Estonia would enhance its independence and authority for data governance in accordance with the European statistics Code of Practice.</p>
<p><b>Deadline:</b> Q4 2025</p>
<p><b>Responsible institution for improvement sub-action 5.1:</b> Statistics Estonia</p>
<p><b>Improvement sub-action 5.2:</b> The Ministry of Finance, together with the Ministry of Economic Affairs and Communications and in co-operation with Statistics Estonia, agrees on the appropriate set-up for Statistics Estonia in the data governance domain and, if necessary, makes a proposal to the Government of Estonia for changing the existing set-up. The ministries may decide to assess whether the authority for performing new tasks assigned to Statistics Estonia is sufficiently regulated in Estonian legislation and is optimally organised institutionally.</p>
<p><b>Deadline:</b> Q1 2026</p>
<p><b>Responsible institution for improvement sub-action 5.2:</b> Ministry of Finance, Ministry of Economic Affairs and Communications, Statistics Estonia</p>

<p><b>6. Recommendation</b></p> <p>The Government should take action to ensure that statistics from the NIHD are included as part of official statistics, to ensure conformity with the ES CoP and to avoid duplication of work. (Compliance-relevant: ES CoP, Indicators 1bis.1 and 1bis.2 but also a vast number of other indicators on which little is known for statistics produced by the NIHD)</p>
<p><b>Current situation:</b></p> <p>The National Institute of Health Development (NIHD) produces - apart from other statistics - also European statistics and some of these are submitted as European statistics without the NIHD being assigned as a body of official statistics and hence without the requisite quality assurance. This situation should be corrected to make sure European statistics are produced only by designated bodies of official statistics (Other National Authorities developing, producing and disseminating European statistics (ONAs)).</p> <p>The Ministry of Finance is currently in dialogue with the Ministry of Social Affairs to discuss</p>

the possible ways in managing health statistics.

**Improvement sub-action 6.1:** Statistics Estonia develops a proposal to the Ministry of Finance to include the NIHD into the national statistical system.

**Deadline:** Q4 2023

**Responsible institution for improvement sub-action 6.1:** Statistics Estonia

**Improvement sub-action 6.2** Ministry of Finance and Ministry of Social Affairs will decide on the way of including NIHD's tasks into the framework of producing European statistics and its assignment as a producer of European statistics.

**Deadline:** Q2 2025

**Responsible institution for improvement sub-action 6.2:** Ministry of Finance and Ministry of Social Affairs

## 7. Recommendation

Statistics Estonia should continue to prepare the ground for increased use of administrative data sources in statistics production, including by pushing forward with the initiative on data governance. In this regard, Statistics Estonia should build on its work together with administrative data owners to increase the transparency on the quality of administrative data to develop a vision and a prioritisation for use of these data. (Improvement related: ES CoP, Indicators 2.2 and 10.3)



**Current situation:**

The Official Statistics Act also identifies Statistics Estonia as the body in charge of coordinating data governance in public sector and leading the system of classifications. The Official Statistics Act gives Statistics Estonia the right to access administrative registers and other public administration official databases for use in statistical production. The Act also specifies that administrative data should have primacy as a source of data for statistics production, provided that official statistics quality criteria can be fulfilled in this manner. Cooperation with owners of registers and other statistics producers is governed by a substantial set of formalised and well-structured Memoranda of Understanding. The framework and supporting documentation have been provided on Statistics Estonia's [website](#) (only in the Estonian version, in Estonian).

Co-ordination of data governance has currently four main objectives:

- To establish and maintain the data stewardship framework. The main aim is to develop better stakeholder relations and clear responsibility in government agencies which hold registers.
- To have up-to-date overview of registers, official databases and other relevant data sets. The main aim is to build data catalogues.
- To have better understanding of data. The data owners describe data, which cover also semantic aspects of data.
- To improve data quality. The data quality model has been agreed and is being implemented.

Statistics Estonia is providing guidance to support data governance activities of the holders of administrative data. Statistics Estonia has published guidelines for data governance framework, data descriptions and data quality.

Against this background, the use of administrative data for statistics has increased substantially but it remains a minority share of statistics (some 30%), that are based exclusively on administrative data. There are many reasons for that, including that the information contained in administrative registers may not conceptually match statistical needs. Insufficient quality of administrative registers or lack of understanding of information quality or data description to allow understanding the content of administrative registers are also among the reasons.

The Government has agreed upon and the European Commission has approved Estonia's recovery plan that foresees also the Digital State Reform "Establishment and Development of a Data Management and Open Data Centre of Excellence" (<https://rrf.ee/wp-content/uploads/2021/10/EE-Taastekava-051021.pdf>, in Estonian, p 164-166). Statistics Estonia will participate in implementing the Digital State Reform "Establishment and Development of a Data Management and Open Data Centre of Excellence".

The action plan for the 2023-2030 strategy of Statistics Estonia also foresees activities for data governance.

**Improvement sub-action 7.1:** Statistics Estonia will increase the number of administrative datasets included in its monitoring tool. Monitoring covers different topics: data governance at the agency, responsibility for the dataset, general findability and understandability of the data, and data quality issues.

**Deadline:** Q4 2026

**Responsible institution for improvement sub-action 7.1:** Statistics Estonia

**Improvement sub-action 7.2:** Statistics Estonia will develop a vision on the future use of administrative data, including prioritisation of their use for statistical production.

**Deadline:** Q4 2027

<b>Responsible institution for improvement sub-action 7.2:</b> Statistics Estonia
<b>Improvement sub-action 7.3:</b> Creating a data management team (centre of excellence).
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 7.3:</b> Ministry of Economic Affairs and Communications
<b>Improvement sub-action 7.4:</b> Projects are implemented to improve data reuse and sustainable system for monitoring and supervising the continuous improvement of data quality in administrative registers is established.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 7.4:</b> Ministry of Economic Affairs and Communications
<b>Improvement sub-action 7.5:</b> Publication of open data in the national open data portal has increased at least by 50% compared to 2021 level.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 7.5:</b> Ministry of Economic Affairs and Communications

## 8. Recommendation

8. Statistics Estonia, together with relevant institutions, should jointly build on increased transparency on the quality of administrative datasets and put in place mechanisms, such as peer reviews, that could add further impetus to efforts to boost data quality, e.g. in terms of convergent standards and classifications. (Improvement related: ES CoP, Indicators 8.7 and 10.3)

### Current situation:

Statistics Estonia has developed and agreed upon administrative data quality guidelines within the data stewardship framework. These guidelines are in the review process to assess their relevance against practical development in government bodies and how they correspond to new needs.

To increase data quality, the government issued a decree, obliging the government bodies to improve data quality and mandated Statistics Estonia to implement assessments of the quality of administrative data and to propose improvements.

Estonia does not currently have an information system to facilitate data quality assessment. Monitoring will be done via a survey sent to the government sector agencies. The monitoring will cover the data governance framework implementation on the agency level (maturity) and the data quality requirements on the dataset level, focusing on official registers.

There is a plan to develop a functionality for administering data quality but it is in the conceptual phase. To achieve better transparency about quality, a reporting or auditing process might be implemented. In order to have an up-to-date overview about data in administrative registers and other datasets, which are created by government agencies, a new information system is under development. It will provide a catalogue on open datasets and administrative registers. The catalogue will provide data descriptions in the form of reference metadata.

**Improvement sub-action 8.1:** Statistics Estonia publishes guidelines for data governance

(framework, metadata description, data quality), including the assessment of administrative databases against their data quality criteria. Guidelines will be implemented through pilot projects.
<b>Deadline:</b> Q4 2024
<b>Responsible institution for improvement sub-action 8.1:</b> Statistics Estonia
<b>Improvement sub-action 8.2:</b> Statistics Estonia, jointly with relevant institutions, will decide on appropriate activities to enhance data quality of administrative datasets. The document guiding the efforts to improve the quality of administrative data covers both measures for registers Statistics Estonia uses for official statistics and all official registers, as well as potential data sources for Statistics Estonia. On registers already in use, quality reports will be issued about the 2021 population census in Q1 2023. On other administrative registers an audit will be issued annually to monitor their status and the improvements on data governance, including data quality.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 8.2:</b> Statistics Estonia, Ministry of Economic Affairs and Communications and other relevant institutions

<b>9. Recommendation</b>
To help strengthen the quality of administrative datasets, the Government could clarify the definition of different actors' responsibilities in data governance. (Improvement related: ES CoP, Indicators 8.7 and 10.3)
<b>Current situation:</b> <p>The Official Statistics Act gives Statistics Estonia the right to access administrative registers and other public administration official databases for use in statistical production. The Act also specifies that administrative data should have primacy as a source of data for statistics production, provided that official statistics quality criteria can be fulfilled in this manner. Cooperation with owners of registers and other statistics producers is governed by a substantial set of formalised and well-structured Memoranda of Understanding. The framework and supporting documentation are available on Statistics Estonia's <a href="#">website</a> (only in the Estonian version, in Estonian).</p> <p>Statistics Estonia cooperates with owners of administrative datasets but has not been able to establish sufficient authority to bring about significant progress in the enhancement of the quality of datasets, as the resources for this in the state budget have been scarce and the actions are largely decentralised and depend on the prioritisation by the government sector entities. In 2022, Statistics Estonia strengthened the data governance unit after having been allocated funding from Estonia's recovery plan's Digital State Reform "Establishment and Development of a Data Management and Open Data Centre of Excellence" (<a href="https://rrf.ee/wp-content/uploads/2021/10/EE-Taastekava-051021.pdf">https://rrf.ee/wp-content/uploads/2021/10/EE-Taastekava-051021.pdf</a>, p 164-166, in Estonian).</p> <p>The Government has issued a regulation "Principles for Managing Services and Governing Information" which was amended in 2022, specifying data governance obligations to the government agencies. The Government regulation places guiding, implementation support, and auditing obligations to Statistics Estonia. Statistics Estonia has performed the activities from this regulation via the data governance project of the national recovery plan. There is no permanent budgetary funding for these activities to be carried out after 2025.</p>
<b>Improvement sub-action 9.1</b> The government will issue a decree and implementing acts on a clear definition of responsibilities in the data governance system.
<b>Deadline:</b> Q4 2026

<b>Responsible institution for improvement sub-action 9.1:</b> Government of Estonia
<b>Improvement sub-action 9.2:</b> Statistics Estonia will implement the responsibilities on guidance, implementation support and monitoring of national data governance.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for the improvement sub-action 9.2:</b> Statistics Estonia

<b>10. Recommendation</b>
The Government should ensure that sectoral laws do not impinge on the access rights of official statistics producers to privately held data in particular sectors, such as mobile network operators and credit institutions. (Improvement related: ES CoP, Indicators 2.4 and 9.4)
<b>Current situation:</b>
<p>The Official Statistics Act provides Statistics Estonia with access to ‘data generated or collected in the course of the activities[...]of legal persons in public law and private law’. Given the practical difficulties of accessing what are often weakly structured datasets and the gains from a cooperative process, Statistics Estonia has applied this mandate in the context of negotiated agreements. Going forward, privately held data may become increasingly important for statistics producers. Privately held data often shed light on new activities not covered by other existing data collections, and they often allow the production of high-frequency indicators. Additionally, the traditional survey data collection is increasingly challenged. Hence, having access to privately held data is set to become ever more important.</p> <p>Against that background, although the Official Statistics Act and the Electronic Communication Acts are specific laws, some specific laws do not contain the right of data access for producers of official statistics.</p> <p>The proposed Data Act foresees special data access for statistics producers. Statistics Estonia sees that the current version of Data Act should not hinder its efforts in using privately held data for the public interest. Statistics Estonia’s expectation is that the relevant provisions on the privately held data will be included in the forthcoming proposal of the amended Regulation 223/2009.</p>
<b>Improvement sub-action 10.1.</b> Statistics Estonia will Implement tasks stemming from the EU Data Act and revised EU Regulation 223/2009 related to access privately held data and using them for statistical purposes. Activities include negotiations with holders of private data, striving towards social licence, acquiring resources for technical and methodological readiness to use privately held data in official statistics.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 10.1:</b> Statistics Estonia
<b>Improvement sub-action 10.2:</b> Statistics Estonia will develop relationships with relevant stakeholders aiming at creating favourable ground for the use of privately held data for statistical purposes.
<b>Deadline:</b> Q4 2025
<b>Responsible institution for improvement sub-action 10.2:</b> Statistics Estonia
<b>Improvement sub-action 10.3:</b> Statistics Estonia enhances the technological capacity to receive and process privately held data.
<b>Deadline:</b> Q4 2026

<b>Responsible institution for improvement sub-action 10.3:</b> Statistics Estonia
<b>Improvement sub-action 10.4:</b> Statistics Estonia enhances professional competence of its staff on managing privately held data technically and methodologically by training, knowledge sharing and cooperation with internal and external experts on the use of privately held data.
<b>Deadline:</b> Q4 2026
<b>Responsible institution for improvement sub-action 10.4:</b> Statistics Estonia

<b>11. Recommendation</b>
Statistics Estonia should pursue its efforts on experimental statistics, with a focus on their exploitation in regular statistics production. In due course, experiments with new data sources should be embedded in a more strategic approach. (Improvement related: ES CoP, Indicator 11.1)
<p><b>Current situation:</b></p> <p>Statistics Estonia has been very active in developing and presenting experimental statistics with the aim to seek and test new ways of producing statistics and, in particular, to provide users with interesting novel or fast information beyond the traditional and regular statistical production. New data sources have been acquired, new methods have been applied, data have been linked and combined, and modern visualisation solutions have been used for presentation. This kind of work requires specific competencies and conditions, and therefore a special unit was created for this purpose, presently consisting of twelve experts (six scientists and six analysts).</p> <p>Statistics Estonia uses experimental statistics in the production of official statistics as much as possible. Statistics Estonia’s annual action plan foresees that at least 50% of experimental statistics unit’s resources (FTEs) will be allocated for the prioritised projects in the official statistics production, both for the fulfilment of the statistical programme and for the development of statistics production. Specific projects will be approved in the annual action plan.</p>
<b>Improvement sub-action 11.1:</b> Each year starting from 2023, Statistics Estonia will allocate the necessary resources from the experimental statistics unit towards turning experimental statistics into regular production.
<b>Deadline:</b> Q4 2027
<b>Responsible institution for improvement sub-action 11.1:</b> Statistics Estonia
<b>Improvement sub-action 11.2:</b> Projects in the experimental statistics will be assessed and prioritised on the basis of the future applicability of their methods in the regular statistics, e.g. use of new data sources, modelling. Criteria for the assessment and prioritisation for dual use will be defined (for instance, that the projects have to contribute to the additional revenue for Statistics Estonia and/or to the development of production of official statistics).
<b>Deadline:</b> Q4 2024
<b>Responsible institution for improvement sub-action 11.2:</b> Statistics Estonia
<b>Improvement sub-action 11.3:</b> Statistics Estonia will develop a strategic approach on the use of new data sources for producing experimental statistics.
<b>Deadline:</b> Q4 2026

**Responsible institution for improvement sub-action 11.3: Statistics Estonia**

**12. Recommendation**

Statistics Estonia needs to build on the generally good, albeit unequal and often person dependent, relations with academia to both achieve a higher degree of relations with institutions and a strengthening in areas where such relations are currently relatively weak. (Improvement related: ES CoP, Indicator 7.7)

**Current situation:**

Overall, Statistics Estonia enjoys good relations with academia but possibly reflecting the small size of the country, these relations have been built and maintained over time through personal contacts. This entails a certain fragility in the relationships and may also partly explain why the intensity of cooperation diverges somewhat across different topics.

Statistics Estonia has also strengthened cooperation with research advisors in the ministries by including them in the work of the working group on official statistics. It also consults representatives of academia (all Estonian universities and most experienced research institutions/think tanks) in preparation of the new strategy for Statistics Estonia 2023-2026.

**Improvement sub-action 12.1:** Statistics Estonia will develop an action plan that lays down the principles and activities for cooperation and involvement of the academia in Statistics Estonia's methodology development and improvement and in the legislative process of Estonia.

**Deadline:** Q4 2024

**Responsible institution for improvement sub-action 12.1:** Statistics Estonia

**Improvement sub-action 12.2:** Statistics Estonia will implement the action plan for cooperation and involvement of the academia.

**Deadline:** Q4 2026

**Responsible institution for improvement sub-action 12.2:** Statistics Estonia

**13. Recommendation**

Statistics Estonia should take initiatives to increase the user-friendliness of researcher access to microdata. (Improvement related: ES CoP, Indicator 15.4)

**Current situation:**

Microdata can be used for research purposes by researchers working on approved projects and from approved institutions, which may be legal persons or agencies (including analysis departments of ministries). Students pursuing a master's/PhD degree can also be considered researchers. Currently, the user base consists of more than 200 researchers and over 40 research institutions. The researchers are working mostly remotely (via VPN), but also on dedicated local workstations, located in the safe centre of Statistics Estonia (six workplaces).

There is a demand from researchers for more efficient and user-friendly access to microdata and shortening of the duration of the process of granting access to data. There is also a need to strengthen IT infrastructure, including server capacity. Statistics Estonia is currently carrying out a project to update the system for microdata sharing.

**Improvement action 13:** Statistics Estonia will develop and implement an ICT solution



suitable for microdata sharing allowing better simultaneous access, larger file and data usage, faster processing times, inclusion of additional analyses tools and improving the confidentiality control tools for Statistics Estonia staff. Researchers will be involved during the development process to make sure that the new environment suits their needs.

**Deadline:** Q4 2025

**Responsible institution for improvement action 13:** Statistics Estonia

#### 14. Recommendation

Statistics Estonia should build on the success of the Eight Statistical Services programme to expand the delivery of statistical services against payment. The purpose would be, not least, to address demand from government ministries. (Improvement related: ES CoP, Indicator 11.1)

##### **Current situation:**

The Official Statistics Act stipulates that Statistics Estonia can undertake statistical work under commission outside the scope of the official statistics programme, provided that such activities do not interfere with the programme and are undertaken under the same principles and quality criteria. On this basis, eight statistical services have been identified in 2020 for potential contract work, including obtaining more detailed data and information in different statistical domains than is available in news releases, in the statistical databases or in other different applications, as well as obtaining data that require additional processing or analysis.

Government ministries have stated that the administrative burden to commission (procurement, agreements etc.) services based on official statistics from Statistics Estonia is high and Statistics Estonia intends to find alternatives for transactions with the stakeholders.

**Improvement sub-action 14.1:** Statistics Estonia revises its services to better correspond to the needs of our stakeholders and clients (incl. internal roles, competences, processes). Statistics Estonia updates the service standard for commissioned services and publishes it for clients no later than two months before the beginning of the following year.

**Deadline:** Q2 2024 (annually afterwards)

**Responsible institution for improvement sub-action 14.1:** Statistics Estonia

**Improvement sub-action 14.2:** Statistics Estonia will create a framework of cooperation and funding agreements with public interest representatives for the production and financing of official statistics and providing services.

**Deadline:** Q4 2025

**Responsible institution for improvement sub-action 14.2:** Statistics Estonia

#### 15. Recommendation

Statistics Estonia could usefully consult stakeholders more widely in the preparation of its official five-year work programme, allowing more input, e.g. from the general public and academia. (Improvement related: ES CoP, Indicator 11.1)

**Current situation:**

When preparing the official five-year work programme, Statistics Estonia is in direct and regular contact with public interest representatives. The nature of relationships and interaction between the public interest representatives, representatives of civil society and businesses in Estonia give the latter many possibilities to inform public interest representatives of their new data and statistics needs. Although Statistics Estonia has contacts with civil society through events organised by Statistics Estonia or others, Statistics Estonia usually gains information on their needs from public interest representatives (ministries and others). Statistics Estonia also provides services to business associations which provides it with necessary insight of the needs of business sector.

Statistics Estonia also publicly consults with respondents about the composition of data and the terms of submission. The Statistics Council has a statutory role in commenting on the draft five-year work programme. As a result, coordination with the governmental sector and with respondents is ensured when preparing the programme, but non-governmental users, particularly academia are not formally and regularly involved in activities to identify their needs.

Until 2021 the coordination of the official five-year work programme was somewhat formal and inert, as the budget restraints have made the change of the work programme nearly impossible. This has caused a lot of dissatisfaction among Statistics Estonia's stakeholders in the government sector. This includes applying for additional budgetary funding for implementing new EU legislation on official statistics.

However, as of 2021, Statistics Estonia has introduced new mechanisms to coordinate with government ministries. In addition to regular contacts at the expert level, a working group on official statistics was established (April 2021) with the tasks of: (a) early monitoring of the sectoral statistical needs and creating awareness of the necessary phenomena and indicators; (b) prioritising among competing demands within the timetable for the development of legislation; and (c) agreeing on the need for national statistics to be included in the national budgetary strategy, with the aim of ensuring the necessary funding. Statistics Estonia has also put in place the procedure of including its stakeholders in the process of negotiations on the new law on European statistics. This enables stakeholders to understand and plan for the forthcoming changes in the reporting for the EU and to better acquire and allocate the resources of relevant parties. This procedure has been welcomed by other government sector stakeholders whose activities are affected by the new legislation as Statistics Estonia cooperates with them to include their needs into the procedure.

**Improvement sub-action 15.1:** Cooperation formats will be addressed and analysed in the revision of governance system that will be carried out by the end of 2024. Possible amendments might include abolishment of the yearly revision of the work programme to introduce a more feasible coordination model and development of a more flexible and less burdening funding agreements to cater to the main institutional stakeholders' as well as citizens' needs.

**Deadline:** Q1 2025

**Responsible institution for improvement sub-action 15.1:** Statistics Estonia

**Improvement sub-action 15.2:** Statistics Estonia will submit the proposals together with necessary legal amendments to the Official Statistics Act to the Ministry of Finance who will decide the appropriate way forward.

**Deadline:** Q3 2025

**Responsible institution for improvement sub-action 15.2:** Statistics Estonia

**Improvement sub-action 15.3:** Statistics Estonia will implement a strategy for cooperation with stakeholders that includes a set of principles and an action plan for different groups of



stakeholders. The action plan will be revised yearly.
<b>Deadline:</b> Q2 2024
<b>Responsible institution for improvement sub-action 15.3:</b> Statistics Estonia
<b>Improvement sub-action 15.4:</b> Statistics Estonia will develop the principles of stakeholder and client management and the relevant action plan with the nature, purpose and frequency of stakeholder and client relations. This will include, at least once a year, the coordination of the official five-year work programme. During this, Statistics Estonia will discuss the statistics/data needs and possible cooperation with the relevant stakeholders in civil society.
<b>Deadline:</b> Q2 2024
<b>Responsible institution for improvement sub-action 15.4:</b> Statistics Estonia

<b>16. Recommendation</b>
Statistics Estonia should make use of its increased interactions with ministries to obtain an early sense of upcoming policy needs for statistics to help anticipate future demands on the official statistics programme. (Improvement related: ES CoP, Indicator 11.1)
<p>Current situation:</p> <p>When preparing the five-year work programme, Statistics Estonia directly communicates with central and local government authorities. Statistics Estonia also publicly consults with respondents about the composition of data and the terms of submission. The Statistics Council has a statutory role in commenting on the draft programme. As a result, coordination with the governmental sector and with respondents is ensured when preparing the programme, but non-governmental users, in particular academia, are not formally and regularly involved in activities to identify needs to be reflected in this programme.</p> <p>Several mechanisms are in place for Statistics Estonia to coordinate with government ministries. In addition to regular contacts at the expert level, a working group on national statistics was established (April 2021) with the tasks of: (a) early monitoring of the sectoral statistical needs and creating awareness of the necessary phenomena and indicators; (b) prioritising among competing demands within the timetable for the development of legislation; and (c) agreeing on the need for national statistics to be included in the national budgetary strategy, with the aim of ensuring the necessary funding.</p>
<b>Improvement sub-action 16.1:</b> Statistics Estonia will develop the principles of stakeholder and client management and also the relevant action plan with the nature, purpose and frequency of stakeholder and client contacts.
<b>Deadline:</b> Q2 2024
<b>Responsible institution for improvement sub-action 16.1:</b> Statistics Estonia
<b>Improvement sub-action 16.2:</b> Statistics Estonia will organise at least 3 meetings of the regular working group on official statistics (representatives of ministries and the Government Office, research advisers) every year and has at least 2 meetings each year with each ministry to specify statistics needs and coordinate the compilation of Statistics Estonia's five-year work programme.
<b>Deadline:</b> Q2 2024 (annually afterwards)
<b>Responsible institution for improvement sub-action 16.2:</b> Statistics Estonia

## 17. Recommendation

Statistics Estonia should ensure that in-depth quality assessments cover all statistics at regular intervals, hence giving a view external to the production process on individual statistics, and possibly including input by experts from outside the institution e.g. academia and other National Statistical Institutes. (Improvement related: ES CoP, Indicator 4.4)

### **Current situation:**

To improve the quality of products and to strengthen internal processes and information flows, Statistics Estonia has developed in 2020, a system of quality assessments of statistical activities and products based on two main pillars: light assessments and in-depth assessments. Both assessments are carried out by statisticians responsible for the statistical activity or output.

**Improvement sub-action 17.1:** Statistics Estonia will revise the quality assessment principles and procedure with the help of external consultant(s).

**Deadline:** Q4 2025

**Responsible institution for improvement sub-action 17.1:** Statistics Estonia

**Improvement sub-action 17.2:** Statistics Estonia conducts assessments regularly and transparently, at least one in-depth quality assessment per year and a light assessment on general performance for every official statistics activity following the GSBPM.

**Deadline:** Q4 2026 (annually afterwards)

**Responsible institution for improvement sub-action 17.2:** Statistics Estonia

**Improvement sub-action 17.3:** Statistics Estonia implements the improvements identified during the quality assessments, improves its production processes and reports to senior management once a year.

**Deadline:** Q4 2026 (annually afterwards)

**Responsible institution for improvement sub-action 17.3:** Statistics Estonia

**Improvement sub-action 17.4:** Statistics Estonia develops the principles of stakeholder and client management and the relevant action plan with the nature, purpose and frequency of stakeholder and client contacts. This document includes the criteria for involving both domestic and foreign researchers and experts in the evaluation of statistics output and development of methodology.

**Deadline:** Q2 2024

**Responsible institution for improvement sub-action 17.4:** Statistics Estonia

## 18. Recommendation

Statistics Estonia needs to continue efforts to standardise and automate data processing and to update software and questionnaires used in data collection. (Improvement related: ES CoP, Indicators 9.3, 10.2 and 10.4)

### Current situation:

Statistics Estonia relies significantly on administrative data sources and efforts are made to continue in this direction. Nonetheless, statistical surveys remain an important activity of Statistics Estonia. While approximately 30% of statistical activities are based exclusively on administrative data sources, most other activities use a combination of administrative and survey data. Most questionnaires are intended for businesses, substantially less for households. The main complaint in the continuous respondent satisfaction survey relates to the tool used and has confirmed the need to redesign the data collection service which is taking place during 2020-2024. Internal modernisation of processes has focused on standardisation and automation, mainly data processing and calculations of output.

Further progress on data processing would consist mainly in automating these processes and requires demanding and skill-intensive preparatory work in the form of methodological developments, such as defining precise rules for selective editing, including automating certain logical checks, validation, imputation, aggregation, quality measurement etc. As regards the calculation of output, standardisation and automation at present covers approximately 35% of output variables.

**Improvement sub-action 18.1.1:** Statistics Estonia conducts an analysis to identify the resources needed to reduce manual processing and analysing and to identify the need for new processing applications throughout the statistics production process, including data collection, processing, analyses, dissemination.

**Deadline:** Q2 2024 (annually afterwards)

**Responsible institution for improvement sub-action 18.1.1:** Statistics Estonia

**Improvement sub-action 18.1.2:** A separate legacy liquidation action plan will be created in relation to the analysis in 18.1.1

**Deadline:** Q2 2024

**Responsible institution for improvement sub-action 18.1.2:** Statistics Estonia

**Improvement sub-action 18.1.3:** A comprehensive IT risk assessment will be conducted in relation to the analysis in 18.1.1.

**Deadline:** Q2 2025

**Responsible institution for improvement sub-action 18.1.3:** Statistics Estonia

**Improvement sub-action 18.1.4:** A concept of an internal control system will be developed in relation to 18.1.1

**Deadline:** Q2 2025

**Responsible institution for improvement sub-action 18.1.4:** Statistics Estonia

**Improvement sub-action 18.1.5:** On the bases of the analyses a quality management system will be established.

**Deadline:** Q4 2025

<b>Responsible institution for improvement sub-action 18.1.5:</b> Statistics Estonia
<b>Improvement sub-action 18.2:</b> Statistics Estonia continuously analyses and improves the processes and technology used in the statistics production with the aim to reduce manual work and increase users' satisfaction.
<b>Deadline:</b> Q1 2025 (annually afterwards)
<b>Responsible institution for improvement sub-action 18.2:</b> Statistics Estonia, Ministry of Finance and the IT Centre of the Ministry of Finance
<b>Improvement sub-action 18.3:</b> Statistics Estonia applies data science in producing official statistics by using competencies and knowhow of experimental statistics unit and thereby reduces the volume of data collection.
<b>Deadline:</b> Q4 2025
<b>Responsible institution for improvement sub-action 18.3:</b> Statistics Estonia
<b>Improvement sub-action 18.4:</b> Statistics Estonia continues modernizing data collection service with a goal to increase the users' satisfaction with the service. New collection service will be fully launched.
<b>Deadline:</b> Q4 2026
<b>Responsible institution for improvement sub-action 18.4:</b> Statistics Estonia

<b>19. Recommendation</b>
Statistics Estonia should take initiatives to spread knowledge in-house of outcomes of research projects and experimental statistics. (Improvement related: ES CoP, Indicator 7.6)
<p><b>Current situation:</b></p> <p>Statistics Estonia has been very active in developing and presenting experimental statistics with the aim to seek and test new ways of producing statistics and particularly to provide users and producers with interesting novel or fast information beyond the traditional and regular statistical production. New data sources have been acquired, new methods have been applied, data have been linked and combined, and modern visualisation solutions have been used for presentation. This kind of work requires specific competencies and conditions, and therefore a special unit was created for this purpose, presently consisting of seven experts (four scientists and three analysts).</p> <p>Outcomes of experimental statistics are spread and presented internally by recorded virtual information hours, news on the intranet spread on weekly information letters, as well as other internal communication means to exchange best practices and use cases between teams.</p> <p>The work of the experimental statistics unit is used at least partly in developing new methods in official statistics.</p>
<b>Improvement sub-action 19.1:</b> A strategic communication strategy for Statistics Estonia will be developed;
<b>Deadline:</b> Q4 2024
<b>Responsible institution for improvement sub-action 19.1:</b> Statistics Estonia
<b>Improvement sub-action 19.2:</b> Experimental statistics unit of Statistics Estonia will host at

<p>least 2 in-house presentations on their most recent projects each year. The abstracts and additional relevant information on the finished and ongoing experimental statistics' projects will be made available both on the intranet and the Statistics Estonia's website.</p>
<p><b>Deadline:</b> Q4 2023 (annually afterwards)</p>
<p><b>Responsible institution for improvement sub-action 19.2:</b> Statistics Estonia</p>
<p><b>Improvement sub-action 19.3:</b> Statistics Estonia develops a competency model for analytical staff that promotes a part-time rotation between experimental and official statistics that is available for analysts as part of the future platform and principles for mutual knowledge exchange (knowledge of foreign assignments, best practices of other organisations, cooperation between internal trainers, etc.)</p>
<p><b>Deadline:</b> Q1 2025</p>
<p><b>Responsible institution for improvement sub-action 19.3:</b> Statistics Estonia</p>