



DEVELOPMENT STRATEGY FOR THE STATISTICAL ECOSYSTEM

2021 TO 2023



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Foreword

Value of statistics comes from their use

Official statistics are our shared national capital and our common data basis that are used in society in various contexts. Statistics are employed widely in social decision-making, legislative drafting and planning. They are used to monitor the effects of the decisions made and they are also generally used indicators to monitor the development of society.

Statistics are used when they are trusted and their impartiality is believed in. On the other hand, the effectiveness of statistics and their connections to several aspects in society also make them vulnerable. Manipulation, misuse of information and deliberate distortion are difficult to check and control amidst the flood of information. Reliability of statistics has also been at stake in recent decades due to abuses detected in some countries.

The reliability and independence of statistics are protected nationally and internationally by various means. The Statistics Act, good principles of statistics production, the EU's statistical legislation and international recommendations form the framework on which reliable data production is based. It is also important to make the production methods of statistics visible, to act openly and to communicate proactively about changes to statistics compilation in order to maintain trust.

The Official Statistics of Finland are produced by many organisations in Finland. In cooperation, we develop Finland's statistics production to meet the challenges of society nationally and monitor international development. By working together we can learn from each other and share best practices openly. In cooperation we can also build a picture of the quality and importance of statistics for the users of statistics. Our aim is to develop statistics production so that the value of official statistics to users will last in future as well.

The development strategy for the now completed statistical ecosystem extends to the year 2023. By means of this strategy, we producers of statistics will together aim to build reliable and effective statistics in Finland that will meet the needs of users in future, too.

Marjo Bruun
Statistics Finland, director general



1. Vision and task of the statistical ecosystem

Vision

Reliable statistics and data materials for the benefit of society and to support decision-making

Task

The parties to the statistical ecosystem produce key statistics and data materials in society in a high-quality and efficient manner with due respect for data protection.

The produced data and statistics serve the information needs and decision-making of society, decision-makers and citizens.

The data are available to everyone simultaneously and clearly.

Statistical work is based on cooperation, adherence to the principles of statistical ethics, ensuring the quality and coverage of data and creating added value for data users.

Modern society needs up-to-date, high-quality and reliable statistics for decision-making, planning and monitoring. The producers of statistics face a new challenge when data are generated at an accelerating pace in society, new producers of data have entered the information market and the accessibility and usability of data have improved.

Data materials can be utilised in a new way by modernising the production of statistics. Customers' information needs are also growing and becoming more complicated, it is no longer enough to describe one phenomenon, but descriptions of larger entities and phenomena are required.

The value of information comes from its use and utilisation extensively and correctly. The information must be made available to society as a whole. The confidence of society in information will remain when we respect the data protection of individuals and enterprises and produce information with ethical and transparent methods.

Unfortunately, fake news and other misuse of information are also on the increase. In the change, it is important that we data producers monitor the use of information in society and react to erroneous use of information as early as possible.

The statistical ecosystem secures the production of socially essential data, monitors social change in long time series and maintains the quality and reliability of data. The statistical ecosystem is a national network of producers of statistics (Appendix 1), whose actors produce statistics and data materials utilised in them. Suppliers and users of data participate in the statistical ecosystem by releasing and using data. The national statistical eco-

system functions as part of the statistical system of the European Union and cooperates with it (Appendix 2).

In carrying out their duties, producers comply with the fundamental principles of the United Nations statistical work (Appendix 3), European Union legislation, the European Union's Code of Practice (Appendix 4) and national legislation, guidelines and regulations.

The producers of the statistical ecosystem have together defined their visions, tasks and strategic development objectives for the years 2021 to 2023. Achievement of the strategic development objectives is ensured by concrete measures to which each producer is committed. Each year, the producers of statistics evaluate the implementation of the development strategy by utilising the agreed indicators and qualitative evaluations.

The development strategy for the statistical ecosystem have been compiled by hearing stakeholders and customers and taking into consideration the operating environment.

2. Strategic development objectives and measures

To realise the vision and task of the statistical ecosystem, development objectives and concrete measures have been defined for the next three years. The development objectives describe the focus areas with which high-quality services are produced innovatively, efficiently and productively. The measures make the target status concrete.

A. Highlighting the value and importance of statistics in society



The value of statistics for society comes from the data being reliable, up-to-date, combinable, of high quality and long time series have been produced from them. Finns trust public statistics but trust must be maintained constantly. Trust will remain when we respect data protection, address misuse of information, and promote data literacy and citizens' data competence.

The information needs of society become wider and more complicated. At the same time, new data materials and technologies enable the development of statistics production. This requires that the producers of statistics modernise and change the production of statistics responsibly.

Measures:

- a. We speed up the production of data and statistics, for example, for the information needs of crisis situations.
- b. We combine data sources in a new way so that we can describe and analyse phenomena and challenging entities, such as climate change, globalisation, digitalisation and sustainable development.
- c. We communicate together about statistics and data and their value and importance to society.
- d. We intervene in erroneous use of data and prevent the spread of fake news.
- e. We develop and modernise statistics production with consideration to customer needs, data protection, legislation and statistical principles.
- f. We promote statistical literacy and data competence of citizens, authorities and decision-makers in society.
- g. We ensure long-term storage, coverage and reliability of digitally stored information.

B. Promoting the use of data



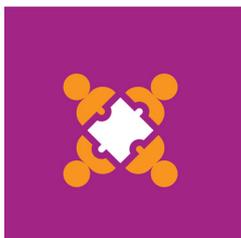
The use of data is at the heart of the evaluation of the added value of data and the benefits to society. In order for the data to be usable, the data must meet the needs of customers, be clear and easily accessible. The production of data must be fast, the used methods must be open and the data easy to find.

The data are usable when versatile distribution channels are in use. We renew distribution channels by utilising new technology and considering the possibilities for cooperation. At the same time, we make sure that the data are compatible and accessible.

Measures:

- a. We develop the dissemination of data and utilise different channels and ways of presenting data in communication, such as social media, videos, infographics and storytelling.
- b. We increase the visibility of statistics in social media and participate more actively in social discussion on information and its utilisation.
- c. We increase the dissemination of open data and open up public data resources in accordance with the recommendations of open administration. We take into account data protection and the reliability of data.
- d. We develop data architecture, data descriptions and data retrievability in accordance with the objectives of technical and semantic interoperability of data.

C. Utilisation and intensification of partnerships



We are able to understand and analyse phenomena and challenging entities better when we produce, process and disseminate data in cooperation and in agile, innovative and flexible ways. New kinds of innovation partnership models enable us to modernise statistics production and bring about a data revolution.

With our partners we renew data collection and processing methods, develop and implement new technological solutions, utilise and disseminate data materials and develop new types of solutions for customers' information needs.

Measures:

- a. We continue to cooperate with data producers, experts and register authorities.
- b. We promote partnerships with researchers, authorities and enterprises in utilising data analytics and in developing machine learning and artificial intelligence.
- c. We strengthen cross-administrative experimentation culture, for example, through joint projects.
- d. We create new partnerships to utilise new data sources.
- e. We invite customers and the media in the planning and defining of new data products, e.g. rapid data, nowcasting, open data.
- f. We contribute to the international statistical development work (EU, OECD, UN, Nordic cooperation).

D. Quality assurance



The data are reliable and usable when their quality is ensured. To support decision-making we need up-to-date and high-quality data. Quality is assured by means of common guidelines, auditing and self-evaluations of statistics production and the quality framework.

Measures:

- a. We develop common quality and methodological guidelines for the statistical ecosystem.
- b. We participate in cooperation between register authorities by working on common quality guidelines and definitions.
- c. We utilise uniform quality reporting and quality descriptions for statistical products.

- d. We assess the quality of statistical production by audits and evaluations, e.g. self-evaluation.
- e. We participate in and support the peer review of the EU Code of Practice.
- f. We invest in the development of the competence of statistical professionals (e.g. Statistics Code of Practice, data analytics, communication, dissemination, artificial intelligence, phenomena).

Appendix 1: Operation of the statistical ecosystem

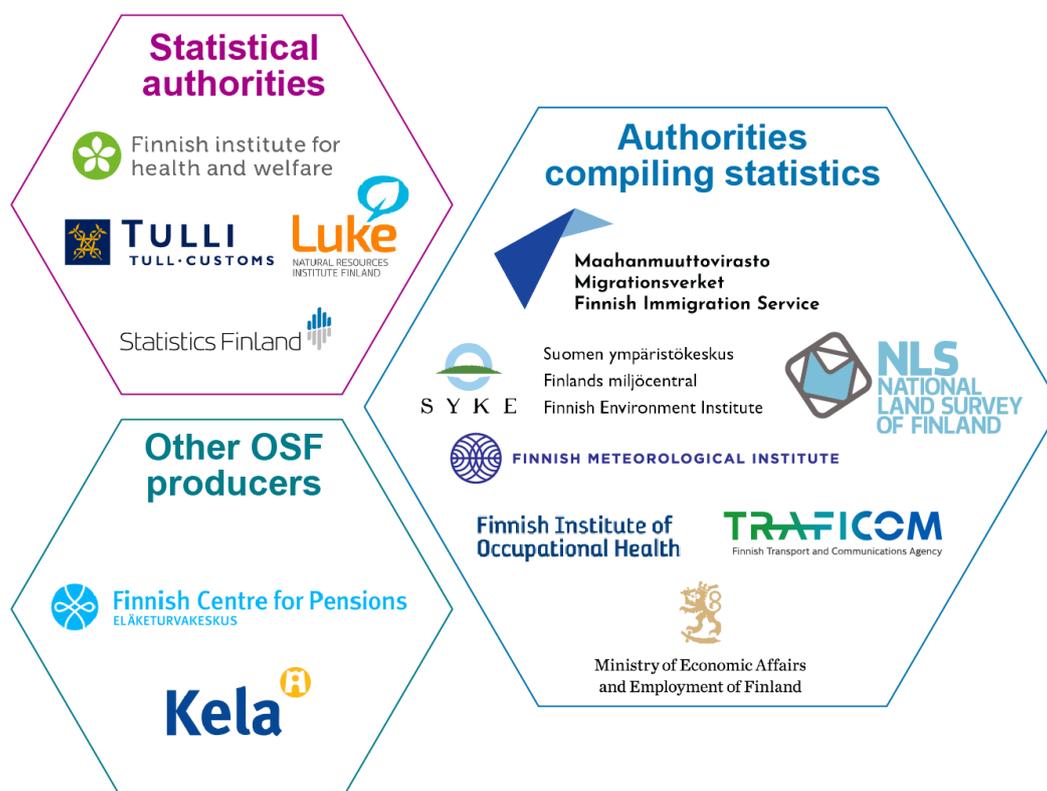
The statistical ecosystem is a network of authorities in the field of statistics whose participants produce Official Statistics of Finland (OSF), statistics for the European Statistical System (ESS) and other statistics. The statistical ecosystem comprises 11 government agencies and institutions and two other institutions producing statistics.

The Statistics Act (280/2004) defines Statistics Finland, Finnish Customs, the Natural Resources Institute Finland and the National Institute for Health and Welfare as the statistical authorities. The statutory task of the statistical authorities is to compile statistics and they are by virtue of law entitled to collect data for the purpose of compiling official statistics based on the data supply obligation. Statistics Finland is the only authority with the main task to produce statistics. Statistics Finland acts as the national statistical office and represents Finland in the EU and in other international statistical cooperation.

In addition to the statistical authorities, other authorities producing official statistics include the Finnish Meteorological Institute, the Finnish Transport and Communications Agency, the National Land Survey of Finland, the Finnish Immigration Service, the Finnish Environment Institute, the Ministry of Economic Affairs and Employment, and the Finnish Institute of Occupational Health. These authorities compile statistics from their own field of activity from data at their disposal that have been collected for another purpose. They can compile statistics using data materials collected on voluntary basis. In terms of compilation of statistics, the Statistics Act is applied to these authorities.

In addition to the above, the Finnish Centre for Pensions and the Social Insurance Institution of Finland are producers of statistics. The Act on the Finnish Centre for Pensions (397/2006) and the Act on the Social Insurance Institution of Finland (731/2001) define that these institutions produce statistics from their own field.

Figure 1: Actors in the national statistical ecosystem



The Statistics Act requires that when collecting data for the production of statistics, data that have been accumulated when handling the tasks of general government are primarily used. Data suppliers are only asked for data that are essential for statistics compilation and identification data can only be collected and saved when it is necessary for the combination of data or when it is otherwise necessary. When data collected for statistical purposes are being processed it is ensured that no person's protection of private life or personal data, or business or professional secret is endangered. Data collected for statistical purposes may not be released for use in an investigation, surveillance, legal proceedings, administrative decision-making or other similar handling of a matter concerning an individual, enterprise, corporation or foundation. Confidential data can, however, be released for the purposes of scientific research and statistical surveys.

The statutory task of Statistics Finland is to ensure the development of the national statistical service in cooperation with other government officials. In addition, the EU Regulation on European Statistics (223/2009) defines that Statistics Finland's task as the national central statistical office is to coordinate the development, production and dissemination of ESS statistics in Finland.

The statistical system of the Official Statistics of Finland includes around 200 statistics on various areas of society. The number of statistics produced annually varies somewhat as some OSF statistics are only produced at set intervals.

The Advisory Board of Official Statistics of Finland that was founded in 2002 is a key cooperation forum that handles the development needs of OSF statistics. The Advisory Board includes all the above-mentioned producers of statistics.

The task of the Advisory Board is to promote the visibility and knowledge of official statistics and to develop the production of uniform, high-quality and reliable official statistics corresponding to customer needs. In addition, the Advisory Board promotes the coordination and cooperation of the national statistical service in line with the objectives of the European Statistical System. At the meetings of the Advisory Board, topical national and international development projects are presented, development strategy for the official statistical service and other recommendations and instructions are prepared in cooperation, and statistical development projects, seminars and meetings of foreign statistical institutes (especially those of the Nordic countries) and international organisations are presented.

Development and cooperation working groups have been founded to tighten the coordination and development work on statistics.

On its web pages, Statistics Finland annually reports on the development of the statistical service, the costs of the national statistical service and the work of the Advisory Board of Official Statistics of Finland.

Appendix 2: The European Statistical System ESS

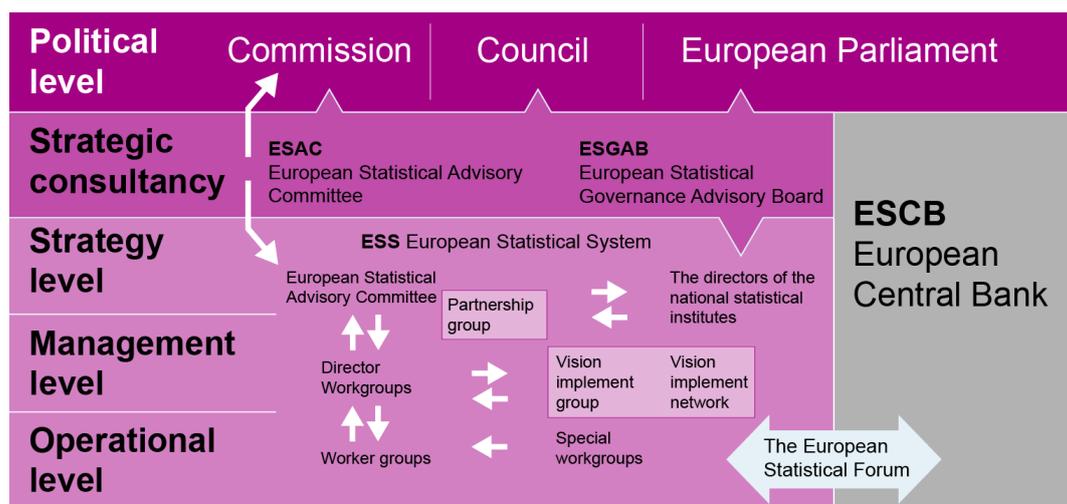
The European Statistical System (ESS) has been organised to develop, produce and distribute European statistics and to assist the European Commission. The ESS consists of Eurostat, National Statistical Institutes (NSI) and Other National Authorities (ONA) that produce, distribute and develop European statistics. The main task of the European Statistical System (ESS) is to serve the European Union in its decision-making and administration.

The European Statistical System Committee (ESSC) provides professional guidance for the development, production and dissemination of ESS statistics in accordance with the statistical principles. Customers and users are represented by the European Statistical Advisory Committee (ESAC) (Decision 234/2008) and the assessment and monitoring of the system is the responsibility of the European Statistical Governance Advisory Board (ESGAB) (Decision 235/2008). The ESS cooperates with the Commission, the Council, the European Parliament and the European Central Bank (see Figure).

The European Statistical System is controlled by the EU Regulation on European Statistics (223/2009). The Regulation on European Statistics defines the common statistical principles and quality requirements of the statistical service, the administrative organisation of the ESS and issues related to the dissemination of statistics and statistical confidentiality. It also defines the cooperation between Eurostat and national statistical offices. In connection with the amendment of the Regulation on European Statistics (759/2015), the coordination task of the national statistical office was revised, the independence of the statistical office and its Director General were strengthened, and the use of administrative data in official statistics was secured.

In addition, statistics production is regulated by some 400 other EU regulations, decrees and decisions. Eurostat annually compiles a handbook on these (Statistical requirements compendium – 2019 edition ¹).

Figure: Cooperation with different parties in the European Statistical System



1 <https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-19-012>

Appendix 3: United Nations' fundamental principles of official statistics

In 1994, the United Nations Statistical Commission adopted a set of 10 fundamental principles of official statistics. These principles may be summarised as follows:

1. Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.
2. To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.
3. To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.
4. The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.
5. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.
6. Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.
7. The laws, regulations and measures under which the statistical systems operate are to be made public.
8. Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.
9. The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.
10. Bilateral and multilateral cooperation in statistics contributes to the improvement of official statistics in all countries.

Appendix 4: European Statistics Code of Practice

In order to ensure the quality, uniformity and common principles of ESS statistics, the Commission has compiled the European Statistics Code of Practice (CoP). The Code of Practice form instructions on which the production of European statistics should be based. The position of the Code of Practice has been determined in the Regulation on European Statistics (223/2009) and the realisation of the principles is monitored regularly.

Institutional environment

1. Professional independence

Professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.

1bis Coordination and cooperation

National Statistical Institutes and Eurostat ensure the coordination of all activities for the development, production and dissemination of European statistics at the level of the national statistical system and the European Statistical System, respectively. Statistical authorities actively cooperate within the partnership of the European Statistical System, so as to ensure the development, production and dissemination of European statistics.

2. Mandate for data collection and access to data

Statistical authorities have a clear legal mandate to collect information for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

3. Adequacy of resources

The resources available to statistical authorities are sufficient to meet European Statistics requirements.

4. Commitment to quality

Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and output quality.

5. Statistical confidentiality and data security

The privacy of data providers, the confidentiality of the information they provide, its use only for statistical purposes and the security of the data are absolutely guaranteed

6. Impartiality and objectivity

Statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Statistical processes

7. Sound methodology

Sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

8. Appropriate statistical procedures

Appropriate statistical procedures, implemented through the statistical processes, underpin quality statistics.

9. Non-excessive burden on respondents

The reporting burden is proportionate to the needs of the users and is not excessive for respondents. The statistical authorities monitor the response burden and set targets for its reduction over time.

10. Cost effectiveness

Resources are used effectively.

Statistical output

11. Relevance

European Statistics meet the needs of users.

12. Accuracy and reliability

European Statistics accurately and reliably portray reality.

13. Timeliness and punctuality

European Statistics are released in a timely and punctual manner.

14. Coherence and comparability

European Statistics are consistent internally, over time and comparable between regions and countries; it is possible to combine and make joint use of related data from different sources.

15. Accessibility and clarity

European Statistics are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

