CHAPTER

THREE

THE BASIS OF OFFICIAL STATISTICS



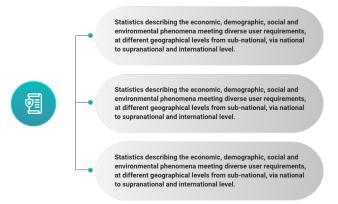


3.1 Introduction

The key concept and the main topic in this handbook are official statistics. This chapter seeks to clarify what is meant by official statistics, the principles that should guide the production of official statistics, and how these principles can be implemented through legislation and guidelines.

3.1.1 Defining official statistics

The concept of official statistics in this handbook is based on the UN Fundamental Principles of Official Statistics (UNF-POS). They promote that official statistics should adhere to well-defined professional and scientific standards, while clearly defining the content and identifying the producers of the statistics. A number of principles, codes and legislative initiatives have contributed to clarifying the concepts outlined in the UNFPOS. Thus, in the context of this Handbook Official statistics¹ are defined as comprising the following three elements:



- Statistics describing the economic, demographic, social and environmental phenomena meeting diverse user requirements, at different geographical levels from sub-national, via national to supranational and international level.
- Statistics developed, produced and disseminated in compliance with the United Nations Fundamental Principles of Official Statistics as well as internationally agreed statistical standards, codes and recommendations fostering trust and ensuring consistent and high quality.

¹ Many countries do not apply the term 'official statistics' but rather use terms such as 'statistics', 'state statistics', 'national statistics', or 'central statistics'. These terms might in some cases mean the same as official statistics but might also differ and lack a clear specification of principles and quality requirements.

• Statistics normally produced by a national statistical office (NSO) and other entities designated as producers of official statistics and indicated as official statistics in relevant legislation and in statistical programmes and documents.

The concept of official statistics used in this Handbook is further defined in *Chapter 3.2 — UN Fundamental Principles of Official Statistics, Chapter 3.4 — Legislative frameworks* and *Chapter 3.5 — Certification and branding of official statistics.* In addition, it will also be covered in *Chapter 4 - The National Statistical System* and *Chapter 7 - Quality Management.* It is essential to underline that proper quality criteria are closely linked to the concept of official statistics as used in this handbook.

3.1.2 The importance of official statistics

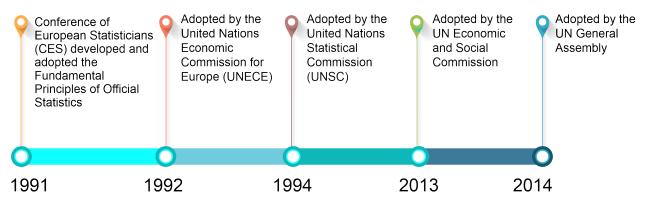
Official statistics should be a cornerstone of a modern society by providing an unbiased and accurate picture of the economic, demographic, social and environmental situation and development in a country.

To an increasing degree, high quality and comparable statistics are also important for analysis and decision-making at the international and global level. Thus, it is essential that official statistics can be trusted by all users and stakeholders and are made accessible and understandable for all users.

A great deal of statistics is also being produced by private and public agencies that are not part of the system of official statistics. Statistics of questionable quality and proper documentation can be potentially confusing and lead to distrust of the national statistical office (NSO) which is supposed to produce unbiased and high-quality official statistics. Therefore, it is of utmost importance that those statistics considered to be 'official' follow strict and well-defined principles and standards.

A more in-depth discussion of official statistics and its importance is provided in Recommendations for promoting, measuring and communicating the value of official statistics, UNECE 2018 (\mathcal{O}).

3.1.3 The need for the UN Fundamental Principles



The need for a set of principles governing official statistics became apparent at the end of the 1980s when countries in Central Europe began to change from centrally planned economies to market-oriented democracies. To re-establish trust in these and similar countries' official statistics, it was essential to ensure that their national statistical systems (NSSs) would produce appropriate and reliable statistics that adhered to established professional and scientific standards. To this end, the Conference of European Statisticians (CES) developed and adopted the Fundamental Principles of Official Statistics in 1991, which were subsequently adopted in 1992 at the ministerial level by Economic Commission of Europe. Statisticians in other parts of the world soon realized that the principles were not necessarily a European phenomenon but were of much wider, global significance. Following an international consultation process, a milestone in the history of international statistics was reached when the United Nations Statistical Commission at its Special Session of 11-15 April 1994 adopted the same set of principles – with a revised preamble – as the United Nations Fundamental Principles of Official Statistics (UNFPOS).

To be effective, the UNFPOS need to be respected by all stakeholders and at all political levels. Thus, the principles were reaffirmed by the Statistical Commission in 2013 and endorsed by the Economic and Social Council in its resolution 2013/21 of 24 July 2013. Finally, the UN Fundamental Principles of Official Statistics (\mathfrak{O}) were adopted on 29 January 2014 at the highest political level as a General Assembly resolution (A/RES/68/261).

These principles and the related Implementation Guidelines (\mathfrak{O}) are covered in *Chapter 3.2 — UN Fundamental Principles* of *Official Statistics* There are several other international principles and guidelines that partly cover the same topics as the UNFPOS. These are described in detail in *Chapter 3.3 — Other principles practices and guidelines*.

3.1.4 Implementing the UN Fundamental Principles

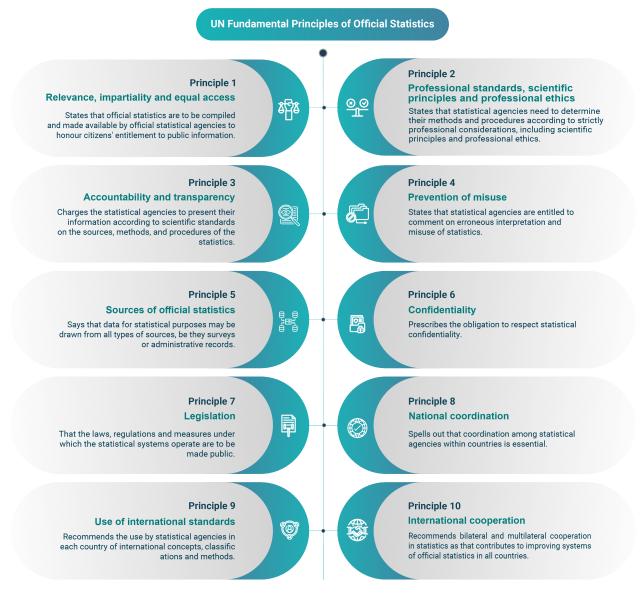
International statistical principles and good practices must be implemented and followed within each national statistical system (NSS) using national legal frameworks and guidelines. The Implementation Guidelines provide advice regarding implementation of legal frameworks, which is further elaborated in *Chapter 3.4 — Legislative frameworks* based on the reference document Guidance on modernising statistical legislation (UNECE 2018) (\mathcal{O}). This document describes in more detail the implementation of legislation in the field of statistics and builds on and provides some extensions and modification to The Generic Law on Official Statistical Conference of the Americas, Generic Law on Official Statistics for Latin America by the Statistical Conference of the Americas, Generic Law on Official Statistics for Latin America (GLOS-LA). These documents represent the efforts to develop a model legal framework for legislation in the field of official statistics based on the UNFPOS and taking into consideration other well-established principles.

When discussing official statistics, it is necessary to differentiate between national and international activities in the field of official statistics. Thus, some parts of this chapter, and of this Handbook, might be more relevant to NSOs than to international agencies. There are also some specific challenges for international agencies that are not covered in detail in this handbook and further articulated in Principles Governing International Statistical Activities (\mathfrak{O}). An additional reference is the UN Statistics Quality Assurance Framework (\mathfrak{O}) that targets UN agencies as well as international and national users of statistics.

The practical implementation of fundamental principles and legislative procedures is further developed in *Chapter 4 - The* National Statistical System, Chapter 5 - The National Statistical Office, Chapter 7 - Quality Management and Chapter 10 -Dissemination of Official Statistics.

3.2 UN Fundamental Principles of Official Statistics

The following description is to a large extent based on the United Nations Fundamental Principles of Official Statistics - Implementation Guidelines (\mathfrak{O}). In addition, criteria and indicators described in the European Statistics Code of Practice (\mathfrak{O}), as well as other guidelines mentioned above, have been taken into consideration, when appropriate.



3.2.1 Principle 1 - Relevance, impartiality and equal access



Principle 1 states that "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."

Relevance:

Motivation for and explanation of the principle:

- Official statistics exist to provide information to the general public, government, businesses and research communities in the economic, demographic, social and environmental fields.
- Official statistics as an important public good in democratic societies, have to meet the needs of users, and must be disseminated in an impartial way (UN Global Review 2013, page 6) (). They are an essential element of the accountability of governments and public bodies to the public in a democratic society.
- Relevance is the degree to which statistics meet current and potential needs of various user groups, including the public.
- Relevance includes the possibility for users to make comparisons in time and space.

Compliance criteria:

- Processes should be in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities.
- Priority needs should be identified and be met and reflected in the work programme.
- User satisfaction should be monitored on a regular basis and systematically followed up.

Impartiality and equal access:

Motivation for and explanation of the principle:

- The use and benefit of official statistics are dependent on their credibility and trust among users.
- Professional independence of producers of official statistics, scientific competence of their staff and impartiality are the crucial preconditions of trust in official statistics.

- Statistics should be compiled on an objective basis determined by statistical considerations.
- Choices of sources and statistical methods, as well as decisions about the dissemination of statistics, should be informed by statistical considerations.
- Errors discovered in published statistics should be corrected at the earliest possible date and publicised.
- Information on the methods and procedures used should be publicly available.
- · Statistical release dates and times should be pre-announced.
- · Advance notice should be given on major revisions or changes in methodologies.
- All users should have equal and simultaneous access to statistical releases. Privileged pre-release access to any user is not recommended and, if any, should be limited, controlled and publicised.
- Statistical releases and statements made in press conferences should be objective and non-partisan and should not contain any policy-prescriptive statements.
- As from the release date, official statistics should be accessible for a sufficiently long period. The underlying microdata should be stored in such a way that they can be used for subsequent statistical purposes by statistical producers and the research community, subject to specific rules.

3.2.2 Principle 2 - Professional standards, scientific principles and professional ethics

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Principle 2 states that "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."

Motivation for and explanation of the principle:

- Public trust in statistics relies heavily on the strict adherence by producers of official statistics to scientific principles and independence from any undue political and external influence.
- Producers of official statistics should be free from conflicts of interest that might be generated through the assignment of non-statistical tasks, or certain statistical tasks outside official statistics, notably with respect to the principles of impartiality and confidentiality.

- The independence of the producers of official statistics from political and other external interference in developing, producing and disseminating statistics should be specified in law both for the NSO¹ and other producers of official statistics, and be associated in the law with appropriate institutional safeguards.
- Staff and statistical experts within the national system of official statistics should follow and respect professional ethics². Laws, regulations, and other mechanisms should reinforce adherence to scientific principles and professional ethics.
- The head of an NSO and, where appropriate, the heads of any other statistical authorities should have sufficiently high hierarchical standing to ensure senior-level access to policy authorities and public administrative bodies. They should be of the highest professional calibre.
- The head of an NSO and, where appropriate, the heads of any other statistical authorities, should have the final responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner. This covers decisions on the development, production, and dissemination of statistics, including the selection of data sources, concepts, definitions, methods and classifications to be used, and the timing and content of all forms of dissemination.
- The head of an NSO and, where appropriate, the heads of any other producers of official statistics, should have the sole responsibility for deciding on statistical methods, standards and procedure and the timing of statistical releases.
- The statistical work programmes should be published, and periodic reports should describe progress made.
- The appointment of the head of an NSO and, where appropriate, the heads of any other statistical authorities, should be based on professional competence only; and not based on political considerations. The reasons on which basis the incumbency can be terminated should be specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

¹ NSO means National statistical office which is the main national office producing official statistics and normally coordinating the national statistical system. In some countries it might be called national statistical institute, central bureau of statistics, central statistical office, or other names.

² For further discussion of professional ethics see the ISI declaration in Chapter 3.3.

3.2.3 Principle 3 - Accountability and transparency

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Principle 3 states that "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."

Motivation for and explanation of the principle:

• The objective is to guarantee user access to necessary information and support the interpretation, the characteristics and quality of official statistics by describing and making available policies and practices surrounding statistical production and dissemination.

Compliance criteria:

- The head of an NSO and, where appropriate, the heads of any other statistical authorities, should guarantee user access to available statistical information including information on sources, methods and procedures used.
- Metadata and quality reports should be made readily available to users that will enable them to judge the fitness of use of the data.
- Producers of official statistics should continuously aim to introduce methodological improvements and systems to manage and improve the quality and transparency of statistics.
- Producers of official statistics should enhance the professional level of staff by encouraging them to attend training courses, to do analytical work, to publish scientific papers and to participate in seminars and conferences.
- To ensure accountability, programmes/strategies, as well as reports on the implementation of the statistical work, should be made public.

3.2.4 Principle 4 - Prevention of misuse

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Principle 4 states that "The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics."

Motivation for and explanation of the principle:

- Incorrect and misleading use of official statistics can harm society, the business community, and the general trust in official statistics.
- Reactions to erroneous interpretation and misuse of official statistics, especially in the media and by public users, are essential to ensure that trust in statistics is maintained and thereby improving the use and understanding of official statistics.
- Educating users on the correct interpretation of official statistics is also crucial.

- Producers of official statistics should comment publicly on statistical issues, including criticisms and misuse of statistics by users.
- Producers of official statistics should develop training material and programmes to educate users on the use and correct interpretation of official statistics.

3.2.5 Principle 5 - Sources of official statistics

Principle 5 states that "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."

Motivation for and explanation of the principle:

• To produce official statistics is a costly and labour-intensive task for statistical offices as well as for respondents. Therefore, statisticians should apply methods in the least intrusive way and choose sources considering data quality, cost-efficiency and response burden.

Compliance criteria:

- The mandate of the statistical authorities to collect information for the development, production and dissemination of official statistics should be specified in law.
- The statistical authorities should be allowed by law to access and collect data for statistical purposes from all public and private data sources and to process such data according to statistical definitions and classifications, and to combine data from different sources.
- Based on legislation, the statistical authorities should compel response to specific statistical surveys and distinguish between mandatory items/questions (that might include the possibility to issue administrative fines) and non-mandatory ones.

3.2.6 Principle 6 - Confidentiality



Principle 6 states that "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."

Motivation for and explanation of the principle:

• A fundamental requirement for official statistics is public confidence and acceptance. To maintain respondents' trust, it is the utmost concern of official statistics to safeguard the privacy of data providers (like individuals, households or enterprises) by assuring that no data, whatever their origin, are disseminated that might be traced back to an identifiable person or business.

- Clear provisions should be laid down in the statistical law and national policies to ensure the strict statistical confidentiality of statistical data and its exclusive use for statistical purposes.
- The legislation and/or policy should absolutely guarantee:
- The privacy of data providers (individuals, households, enterprises and other respondents) and the confidentiality of the information about them.
- The security of information received from all data providers during the whole production process.
- The exclusive use for statistical purposes of all data in the statistical system that concerns natural or legal persons, whatever their origin.
- Confidentiality protection should be implemented at each level of the statistical process from the preparation of surveys up to the dissemination of statistical products.

- Penalties should be laid down in the statistical law and/or other legal provisions for any persons (staff or other persons) who wilfully breach the statistical confidentiality, leading to confidential data disclosure.
- Staff of producers of official statistics should upon appointment sign a legally binding confidentiality pledge. The same applies to third parties who, due to any activity performed within the scope of the NSS, have access to confidential data.
- Guidelines and instructions on the protection of statistical confidentiality should be provided to staff.
- The confidentiality policy should be made known and explained to the public.
- Physical, technological and organizational provisions should be in place to protect the security and integrity of statistical databases. Strict protocols should apply to users accessing statistical microdata for research purposes.

3.2.7 Principle 7 - Legislation



Principle 7 states that "The laws, regulations and measures under which the statistical systems operate are to be made public."

Motivation for and explanation of the principle:

- Updated and proper legislation is critical to the effective performance of a national statistical system (see *Chapter* 3.4 Legislative frameworks for further discussion of legislation).
- Transparency of legislation, rules and measures pertaining to the operation of the statistical system is a precondition for maintaining trust in official statistics.

Compliance criteria:

- The provisions of a statistical law should cover all phases of developing, producing, disseminating and communicating official statistics, and apply to all data collected or obtained for statistical purposes.
- Public availability and full transparency of laws, regulations, and measures under which a national statistical system operates is a precondition for enforcing the laws, regulations and measures among stakeholders.

3.2.8 Principle 8 - National coordination



Principle 8 states that "Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system."

Motivation for and explanation of the principle:

- Coordination of statistical activities is necessary to avoid duplication of work, data gaps, conflicting terminology and the dissemination of conflicting results, no matter what the organizational arrangements are for producing national statistics.
- Coordination is also necessary to minimize the reporting burden of respondents and to facilitate the integration of data from different sources using statistical standards.

- The mandate/power to coordinate the statistical system should be specified in law.
- Necessary mechanisms for coordination should be implemented.

- The national coordinating body, most often the NSO, should effectively coordinate statistical activities within the NSS and thereby improve the consistency and efficiency of the statistical system.
- Exchange of technical knowledge, including training courses and workshops for members of the system, can support the use of common conceptual framework, processes and appropriate statistical methods.
- When standards are generated for use by the producers of official statistics, control mechanisms for implementing them should be established.

3.2.9 Principle 9 - Use of international standards



Principle 9 states that "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."

Motivation for and explanation of the principle:

- Use of international standards enhances quality, comparability and usefulness of national statistics.
- Comparability is an essential dimension of quality, and non-comparable statistics lose a lot of their utility and value for the users.
- Use of common standards improves efficiency, both within individual agencies, and across the whole system of official statistics.

Compliance criteria:

- The obligation to use international concepts, classifications and methods for developing, producing, and disseminating official statistics should be specified in law and monitored throughout the statistical system.
- Use of international concepts, classifications and methods should be promoted in the national statistical system.

3.2.10 Principle 10 - International cooperation



Principle 10 states that "Bilateral and multilateral cooperation in statistics contributes to improving systems of official statistics in all countries."

Motivation for and explanation of the principle:

- An essential requirement to develop high-quality statistics is to share challenges, lessons learned and best practices between producers of official statistics from different countries.
- International cooperation should contribute to the development of national statistical capacities. Active international engagement, including capacity building projects, has a positive impact on the image of the NSO and may have an impact on domestic trust in the NSO of both sides (beneficiary and donor).
- In general, international cooperation should be a win-win situation for both partners of the cooperation as partnerships should be based on finding joint solutions for challenges and tasks.

Compliance criteria:

• The NSO, and when relevant, other statistical agencies, should actively participate in the main international discussion forums pertaining to statistics, such as the United Nations Statistical Commission, to ensure continuous improvement of statistics at the international level.

3.3 Other principles practices and guidelines

This section describes a number of other international principles and guidelines.

3.3.1 A Human rights-based approach to data

A Human Rights-Based Approach to Data () produced by the UN Office of the High Commissioner for Human Rights focuses on the following principles. Some of these principles overlap with the UN Fundamental Principles, whereas others provide some additional perspectives.

- **Participation**: Participation of relevant population groups in data collection exercises, including planning, data collection, dissemination and analysis of data.
- **Data disaggregation**: Disaggregation of data allows users to compare population groups and understand specific groups' situations. Disaggregation requires that data on relevant characteristics are collected.
- **Self-identification**: For the purposes of data collection, populations of interest should be self-defining. Individuals should have the option to disclose or withhold information about their personal characteristics.
- **Transparency**: Data collectors should provide clear, openly accessible information about their operations, including research design and data collection methodology. Data collected by State agencies should be openly accessible to the public.
- **Privacy**: Data disclosed to data collectors should be protected and kept private, and confidentiality of individuals' responses and personal information should be maintained.
- Accountability: Data collectors are accountable for upholding human rights in their operations, and data should be used to hold states and other actors to account on human rights issues.

3.3.2 IMF standards for data dissemination

The IMF has taken steps to enhance transparency and openness of statistics of member countries, including setting voluntary standards for dissemination of economic and financial data in the IMF Standards for Data Dissemination (). The Special Data Dissemination Standard (SDDS) was established in 1996 to guide members that have, or might seek, access to international capital markets in providing their economic and financial data to the public. The General Data Dissemination System (GDDS) was established in 1997 for member countries with less developed statistical systems as a framework for evaluating their needs for data improvement and setting priorities. In 2012, the SDDS Plus was created as an upper tier of the IMF's Data Standards Initiatives to help address data gaps identified during the global financial crisis. In 2015 the enhanced GDDS (e-GDDS) replaced the GDDS. More than 97 per cent of IMF member countries participate in the e-GDDS, SDDS, or SDDS Plus.

3.3.3 ISI Declaration on professional ethics

The International Statistics Institute (ISI) has issued a Declaration on Professional Ethics (\mathfrak{O}), which sets out the professional values and principles that should govern statisticians' work in general. The Declaration is also relevant for official statistics. It is fully in line with the UNFPOS and also brings in important ethical perspectives. The values and principles are as follows:



Proefessional values

- Respect;
- Professionalism;

• Truthfulness and integrity.



Ethical principles

- Pursuing objectivity;
- Clarifying obligations and roles;
- Assessing alternatives impartially;
- Conflicting interests;
- Avoiding pre-empted outcomes;
- Guarding privileged information;
- Exhibiting professional competence;
- Maintaining confidence in statistics;
- Exposing and reviewing methods and findings;
- Communicating ethical principles;
- Bearing responsibility for the integrity of the discipline;
- Protecting the interests of subjects.

3.3.4 OECD recommendations on good statistical practice

The Recommendation of the OECD Council on good statistical practice (\mathcal{O}) is addressed to both members and nonmembers of the OECD. Most of these issues raised there are covered in the discussion of the UN Fundamental Principles. Some additional points are adequacy of human and financial resources and exploring innovative methods and alternative data sources. Quality of statistical outputs and processes is also more directly specified. The Recommendation covers the following topics:

- Legal and institutional framework;
- Professional independence;
- Adequacy of human and financial resources;
- Protect the privacy of data providers;
- Right to access administrative sources;
- Impartiality, objectivity and transparency;
- Quality of statistical outputs and processes;
- User-friendly data access and dissemination;
- Co-ordination of statistical activities;
- International co-operation;
- Exploring innovative methods and alternative data sources.

3.3.5 European Statistics Code of Practice

The European Statistics Code of Practice (\mathcal{O}) covers to a large extent the same main principles as the UN Fundamental Principles but with some more specification of issues related to professional independence, quality and dissemination. Adequacy of resources is also a specific principle. The principles described are the following:

• Institutional environment

- Professional independence / Coordination and cooperation;
- Mandate for data collection;
- Adequacy of resources;
- Commitment to quality;
- Statistical confidentiality;
- Impartiality and objectivity.
- · Statistical processes
 - Sound methodology;
 - Appropriate statistical procedures;
 - Non-excessive burden on respondents;
 - Cost-effectiveness.

• Statistical output

- Relevance;
- Accuracy and reliability;
- Timeliness and punctuality;
- Coherence and comparability;
- Accessibility and clarity.

3.3.6 Code of Good Practice in Statistics for Latin America and the Caribbean

The Code of Good Practice in Statistics for Latin America and the Caribbean (\mathcal{O}) approved in 2011 at the sixth meeting of the Statistical Commission of the Americas of the Economic Commission for Latin America and the Caribbean, follows to a large extent the headings and the indicators of the European Statistics Code of Practice.

3.3.7 ASEAN Community Statistical System (ACSS) Code of Practice

The ACSS Code of Practice (\mathcal{O}) as adopted by the ACSS Committee at its 2nd Session in Siem Reap, Cambodia, in 2012, is also consistent with the UN Fundamental Principles of Official statistics and comprises eight principles under three main headings:

- Institutional Environment
 - Mandate for data collection;
 - Professionalism & integrity;
 - Confidentiality;
 - Accountability;

- Statistical cooperation & coordination.

• Statistical Process

- Cost-effectiveness;
- Reduced respondent burden.
- Statistical Output
 - Commitment to quality (relevance, reliability, timeliness, comparability & accessibility).

3.3.8 African Charter on Statistics

The African Charter on Statistics (\mathfrak{O}) was adopted by the African Union Commission in 2009. The Charter is based on the UN Fundamental Principles and comprises the following main headings:

- Professional independence;
- Quality;
- Mandate for data collection and resources;
- Dissemination;
- Protection of individual data, information resources and respondents;
- Coordination and cooperation.

3.3.9 CARICOM'S Good Statistical Practices

CARICOM'S Statistics Code of Practice (), adopted by the Standing Committee of Caribbean Statisticians (SCCS) in 2011, is modelled after the European Code; It has 15 principles under three main headings: i) Institutional Environment, ii) Statistical Processes, and iii) Statistical Output and 78 indicators.

3.3.10 Principles and Practices for a Federal Statistical Agency

The Principles and Practices for a Federal Statistical Agency (\mathcal{O}) include four principles and thirteen practices. A number of these principles and practices overlap with the UN Fundamental Principles, whereas others provide some additional perspectives. **The four Principles are:**

- 1. Relevance to policy issues;
- 2. Credibility among data users;
- 3. Trust among data providers;
- 4. Independence from political and other undue external influence.

The thirteen Practices are:

- 1. A clearly defined and well-accepted mission;
- 2. Necessary authority to protect independence;
- 3. Use of multiple data sources for statistics that meet user needs;
- 4. Openness about sources and limitations of the data provided;
- 5. Wide dissemination of data;
- 6. Cooperation with data users;

- 7. Respect for the privacy and autonomy of data providers;
- 8. Protection of the confidentiality of data providers' information;
- 9. Commitment to quality and professional standards of practice;
- 10. An active research program;
- 11. Professional advancement of staff;
- 12. A strong internal and external evaluation program;
- 13. Coordination and collaboration with other statistical agencies.

3.4 Legislative frameworks

Well-developed national legislation regulating the production of official statistics is necessary to ensure the implementation of the principles described in *Chapter 3.2 — UN Fundamental Principles of Official Statistics*. The overall target is to ensure the production of official statistics with a high level of quality, meeting users' needs and being trusted by users and other stakeholders.

As legal structures and traditions vary between countries, legal frameworks for the production of official statistics have to be adapted to the national context.

3.4.1 Types of legislative frameworks

A successful national statistical system should have the flexibility to respond to changing conditions and circumstances without needing to change its primary legislation frequently. A flexible legal environment minimizes legislation changes and the associated risk of political interference with the legislation when it is opened for revision.

The Guidance on modernising statistical legislation, UNECE 2018 (\mathcal{O}) discusses the issue of flexibility versus stability in section 3C6.

One characteristic of a flexible legislative framework is developing and maintaining definitions, methodologies and standards for official statistics without the need to amend legislation when they change. It may even be better not to list the different producers of official statistics belonging to the NSS in the statistical law, but to regulate only the procedure for their identification and criteria for which products should be part of the national statistical programme. Similarly, it is advisable to describe the statistical domains and outputs of the NSO/NSS in general terms rather than listing them one by one. Such lists may be understood to be complete and preclude abandoning redundant statistics and prevent the development of new statistics.

A statistical system that on one side ensures the stability of key principles and structures with the necessary flexibility might combine several legal instruments:

- The national law on official statistics: the core of the legal system would be the national law on official statistics. This should, in principle, translate the UNFPOS into the national legal and regulatory framework. It is advised to keep the statistical law rather general and leave the implementation details for the by-laws (e.g. regulations, orders and decrees). This law would typically have to be developed through a well-prepared process involving different stakeholders and be endorsed by the legislator (e.g. Parliament). Chapter 3.4.3 The content and structure of a national statistical law will treat this in more detail.
- **Regulations, orders and decrees**: implementing the law on official statistics might be made through regulations, orders and decrees. These decisions might regulate some issues more in detail or cover items of a shifting or temporary character. This might be related to the NSS composition, structure and content of the statistical programmes and organizational issues. The power of decision might be delegated to the President, the Prime Minister, a line minister or sometimes the head of the NSS/chief statistician.

• **Guidelines and handbooks**: non-formal guidelines and handbooks could clarify in more detail technical or methodological issues to apply across the entire NSS. Such guidelines and handbooks, endorsed by the chief statistician, may often not have legal status but can be updated more frequently¹.

For instance, a national code of practice might have its basis in the national law on official statistics but then be developed and updated through regulations, orders or decrees, if needed. However, implementation guidelines of the code could be endorsed by the chief statistician in consultation with other producers of official statistics.

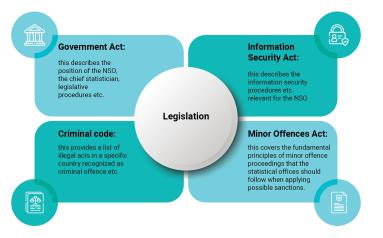
3.4.2 The relationship between legislation in the field of official statistics and other legislation

The legislation in the field of official statistics may have cross-linkages with the other legislation not directly related to statistics. Other legislation might conflict with the statistical legislation, with the risk of hindering the coordination and functioning of the NSS. Thus, when revising or updating the statistical legislation, these cross-linkages must be carefully taken care of.

The Guidance on modernising statistical legislation, UNECE 2018 (\mathfrak{O}) provides in Chapter 6C a detailed discussion of many of the issues to be considered. The document recommends that the statistical law prioritise the safeguard of the UNFPOS, avoiding, in particular, any breaches with the principle of confidentiality and professional independence of statistical authorities. In the proposed common elements of statistical legislation, it is thus, stated that:

"Any other legal act referring to official statistics shall be adapted to comply with the statistical law. In case of conflicting legislation, the provisions of the statistical law or another act based on or mentioned in the statistical law shall apply."

The document further identifies legislation that could be referred to in the statistical legislation:



- Government Act: this describes the position of the NSO, the chief statistician, legislative procedures etc.;
- Information Security Act: this describes the information security procedures etc. relevant for the NSO;
- Criminal code: this provides a list of illegal acts in a specific country recognized as criminal offence etc.;
- Minor Offences Act: this covers the fundamental principles of minor offence proceedings that the statistical offices should follow when applying possible sanctions.

Furthermore, statistical legislation might have an impact on the following legal acts:

• **Public Servants Act:** The Public Servants Act could conflict with the appointment procedure and the mandate of statistical staff. To comply with the principle of professional independence of statistical production, the appointment procedure, the mandate and reasons for dismissal of the Head of statistical office should be defined in the statistical legislation, to avoid suspicion of political interference.

¹ Chief statistician is the head of the NSO and is also likely to be head of the NSS. Also, often called Director General, President, Chief Executive Officer or equivalent.

- **Public Finance Act:** The budgetary provisions of the Public Finance Act may affect the process for budget allocation to the NSO and the statistical system. Thus, the NSO and other partners should be directly involved in the planning and budgetary process.
- Legal acts governing administrative or other data sources: e.g. registers, Big Data, privately held databases. Statistical legislation typically should give a clear mandate for access to data from all administrative data sources and existing registers held by public authorities and private data holders.

However, there might be cases where legislation regarding the protection of individual data in administrative sources do not allow the transmission of these data, with identifier to producers of official statistics, even if the statistical law provides a legal basis for this transmission. In this case, the option would be to strengthen the statistical law provision allowing producers of official statistics to access administrative data at micro-level and ensure when legal acts governing data sources are revised to allow this access explicitly for statistical purposes.

The same issue might arise regarding access to business data and other private parties' databases containing personal data. In the future, to be able to use data from these sources, changes in relevant legislation and necessary agreements on appropriate usage and pricing might be necessary.

- Electronic Communication Act: The Electronic Communication Act may include an explicit ban of allowing access to electronic communication data for statistical or any other purpose, except for clearly defined purposes, such as national security, defence of public security. As data generated in publicly available electronic communications networks could be instrumental for the production of official statistics, necessary amendments in relevant legislation could be foreseen.
- **Privacy and Data Protection Act:** The Privacy and Data Protection Act regulates the protection of individuals with regard to the processing and sharing of personal data. Official statistics are often provided exemptions from the right of persons to review, correct or remove their data because data held by statistical authorities are not used to make any decisions about individuals. This exemption should also be part of the statistical legislation.

One issue, related to this, is the full protection of individual data obtained exclusively for statistical production that should be ensured in the statistical legislation. These data should not be used for any investigation, surveillance, legal proceedings, administrative decision making or other similar handling of matters concerning a natural or a legal person by any authorities or international organizations. Thus, full protection of data within the statistical system should be provided, even if some other national laws might open up for the possibility also to access such data.

- Archiving Act: The Archiving Act provides for the procedure and archiving of data of national interest. The Act applies when statistical data become part of the public archive and provide obligations for electronic archiving. There could be some conflicting regulation between the statistical and archiving legislation, for instance, about national interest and what is not, who could be the data's warden and how this data should be archived, including the technological environment. Divergences should be reviewed when revising either legislation.
- **Public Information Access/ Freedom of Information Act:** The Public Information Access Act governs the procedure which ensures everyone free access to and right to reuse public information held by state bodies, local government bodies, public agencies, public funds and other entities of public law, public powers holders and public service contractors. As defined in statistical legislation, confidential data should be an exemption to the general rule of free access to the data held by the government bodies. The Public Information Access Act should define confidential statistical data referred to in the statistical law to avoid conflicting legislation. This access for statistical purposes should be treated as an exemption in the Public Information Access Act.
- **Census legislation in relation to the statistical legislation:** The preparation and conduct of a population and housing census, regardless of the methodology, requires a legal basis, be it the general regulations of the statistical law, a specific article in the statistical law or a dedicated census act. If such an act exists, the relationship between a national law on official statistics and specific census act should be harmonised to ensure consistency related to mandate, handling of confidentiality, dissemination, etc.

The Guidance on modernising statistical legislation also discusses some legal aspects related to censuses in Chapter 8C. It is mentioned that this legislation should typically regulate the following issues related to censuses:

• Funds allocated for the overall census operations;

- General scope and timing of the census;
- Division of work, responsibilities and rights of the participating organizations;
- Obligation for citizens to provide complete and accurate census information, and of the enumerator to record the responses faithfully, and the sanctions and penalties to be imposed for failure to comply;
- Access, utilization and linkage of registers to produce census data or to support field operations.
- Confidentiality of individual information collected in the census operations, and sanctions for confidentiality breaches.
- Legislation regulating the activity of other producers of official statistics: the laws and rules regulating the activity of other producers of official statistics in MDAs and other public authorities such as the Central Bank, might not be in line with the UNFPOS and the statistical.

The Guidance on modernising statistical legislation discusses in Chapter 8D the collaboration between NSOs and the Central Banks, including legislative issues. It also emphasizes that the national statistical law should apply to all activities related to official statistics and carried out by any producer of official statistics. It is stressed that macroeconomic, financial and monetary statistics produced within the Central Bank, are key official statistics. Thus, it is proposed that the entities of Central Banks that produce official statistics should be recognized as statistical authorities and be considered part of the NSS. In return, as members of the NSS, these entities must be professionally independent of the rest of their respective organizations, and their activities follow the national statistical law and the UNFPOS. To adapt to this situation, an amendment of these laws might be necessary.

3.4.3 The content and structure of a national statistical law

Several efforts have been made to propose a model of national laws on official statistics. These include the following:

- The annex of the previous Handbook of Statistical organization (③);
- The Model Bill on Statistics in the Caribbean region (③) addressing the specificities of small island developing states in that region;
- The Model Statistics Law in the Context of the African Charter on Statistics (③) is also an example aiming at assisting countries that would revise their legislation in that region.

The *Guidance on modernising statistical legislation*, UNECE 2018 (\bigcirc) is based on and extends the Generic Law on Official Statistics (GLOS) developed by UNECE in cooperation with EFTA and Eurostat, with the support of the United Nations Statistics Division. The Conference of European Statisticians reviewed the Guidance at its plenary session, 18-20 June 2018, endorsed the Guidance with some amendments and supported the proposals for further work including reviewing the Guidance in five years. The Generic Law on Official Statistics for Latin America (GLOS-LA) was adopted in 2019 by the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean at its tenth meeting. Its purpose is to provide a regional model for Latin American countries interested in formulating or reformulating the legal basis for the functioning of their NSSs and the production of official statistics. The GLOS-LA is an adaptation of the GLOS to the specific Latin American context. In the meantime, the UN Economic and Social Commission for Western Asia (ESCWA) developed the Guide on the Generic Law for Official Statistics in Arab countries (\bigcirc). The publication, issued in September 2021, provides guidelines to establish statistical legislation needed to support the modernization of the statistical systems in the region.

The rest of this chapter is mainly based on these latest generic laws and guidance.

The main headings of a statistical law

The Guidance on modernising statistical legislation suggests the following headings in a law on official statistics:

- Objective and scope of the law;
- Main principles and definitions of official statistics;
- Organization of the national statistical system;

- Statistical advisory council and other advisory bodies;
- Coordination of the national statistical system and statistical programmes;
- Data collection;
- Statistical confidentiality;
- Quality of official statistics;
- Dissemination and communication;
- Statistical services;
- International cooperation;
- Infringements;
- Relationship to other legislation.

Some main issues to be covered in a statistical law

Some of the key issues to be covered in a statistical law are as follows:

- The definition of official statistics, to be distinguished from administrative information, and in compliance with the UNFPOS;
- Definitions of the key concepts used in the law and necessary for the interpretation of the legal text, such as statistical survey, administrative data, statistical unit, individual data etc.;
- Criteria for identifying the national statistical system: who are the producers of official statistics;
- The tasks for the NSO and the chief statistician, especially in relation to coordination and planning;
- The process for developing multiannual and annual programs, user consultations, the involvement of the Statistical Advisory Council, decision process etc.;
- The mandate for data collection ensuring access to administrative data and other data sources;
- The principles and procedures for handling confidential statistical data, securing exclusive use for statistical use of individual data;
- Quality criteria and mechanisms/procedures for ensuring high quality;
- Principles for dissemination securing equal treatment of users and user-friendly dissemination.

3.5 Certification and branding of official statistics

3.5.1 Certification

All statistics produced by national authorities might not comply with the UNFPOS and have the quality necessary to be termed official statistics. Such 'unofficial' statistics will continue to be produced outside statistical legislation and, in many cases, made public by the competent authorities that are not producers of official statistics. In some cases, statistics made public by a producer of official statistics may also not fully comply with the UNFPOS. Thus, it is useful and good practise to implement mechanisms that differentiate between statistics which are considered official from those which are not, regardless of whether they originated from a producer of official statistics.

Typically, such mechanisms should be based on clear criteria and principles, based on the national law on official statistics and/or a national code of practice, based on transparent criteria and in line with available international principles. Multiannual and annual work programmes for official statistics will generally serve as a basis for certifying producers and products considered official statistics.

• Statistics Lithuania:

The activity of Statistics Lithuania is guided by a specific regulation (\mathfrak{O}) approved by the Government of the Republic of Lithuania. In line with its responsibility, Statistics Lithuania applies the following criteria, which are assessed before granting the status of other producer of official statistics and before including statistics into the Official Statistics Work Programme:

- The institution must be a public authority;
- The institution must have been formally given the responsibility to produce specific statistics at the national level; the responsibility to produce specific statistics has to be laid down in legislation;
- The institution has a responsibility to produce specific statistics, for instance, those required by EU legislation;
- The institution has the capability and commitment to comply with the European Statistics Code of Practice.

Statistics Lithuania signs bilateral agreements with other producers of official statistics, which allow gaining personal commitment of the top management of the producers of official statistics and ensuring awareness and execution of the European Statistics Code of Practice. The agreements include a commitment by the producers of official statistics to:

- Adhere to the principles of the European Statistics Code of Practice and to establish measures for the implementation of the provisions;
- Provide information to Statistics Lithuania for the Official Statistics Work Programme and to report on its implementation;
- Harmonize statistical data collection questionnaires with Statistics Lithuania;
- Harmonize statistical methodologies with Statistics Lithuania;
- Monitor and assess labour and other costs incurred by respondents in relation to statistical data collection and implement their reduction measures;
- Ensure the confidentiality of statistical data collected for official statistical purposes;
- Ensure the accessibility of statistical indicators and metadata on the Official Statistics Portal;
- Provide statistical data to Eurostat according to agreed schedules;
- Cooperate with Statistics Lithuania on the development of official statistics.

• Guest working paper by Steve MacFeely and Bojan Nasta:

An approach to certify unofficial statistics, especially for the use in the context of Sustainable Development Goals (SDG), is discussed in "You say you want a [data] Revolution" A proposal to use unofficial statistics for the SDG Global Indicator Framework ()

3.5.2 Branding of official statistics

The concept of 'branding of official statistics' is not used very often. In most cases, the focus is on ensuring the high quality of official statistics. This will be discussed further in *Chapter 7 - Quality Management*.

It should also be noted that the perception of the NSO and other producers of official statistics as independent and professional organizations is a critical aspect in providing a positive image of official statistics as having high quality.

In this section, some examples will show the possibility to design some statistics as official by using a specific logo, generally based on formal procedures.



The UK Statistics Authority:

The UK Statistics Authority (③) differentiates between three types of statistics (called 'official statistics' in the UK context) produced by public bodies:

- National Statistics (which in the terminology of this Handbook will be "official statistics"), which have been assessed by the Office for Statistics Regulation as fully compliant with the (UK) Code of Practice for Official Statistics. For a complete list of all National Statistics, see the list maintained by the Office for Statistics Regulation. Accredited National Statistics use the following quality mark:
- Experimental statistics, which are newly developed or innovative statistics. These are published so that users and stakeholders can be involved in assessing their suitability and quality at an early stage.
- Statistics that have not been assessed as fully compliant with the (UK) Code of Practice. A register of the designated statistics is maintained by the Office for Statistics Regulation.



SCB Sweden:

Statistics Sweden (\mathfrak{O}) uses a label for Official Statistics when published. There are some general requirements for a statistical product to be given that label, whether produced by Statistics Sweden or by one of the many other authorities producing official statistics.

According to the law (Official Statistics Act (2001:99) and Official Statistics Ordinance (2001:100)), official statistics must be for general information, investigation and research. The statistics are to be objective and made available to the public. Statistics Sweden is responsible for coordinating the system for official statistics. It is further stated that when official statistics are published, they are to be labelled as Official Statistics of Sweden or have the symbol.



Official Statistics Authority France:

The Official Statistics Authority (ASP) (\mathcal{O}) , has been put in place, linked to the French Statistical Office, INSEE, (\mathcal{O}) ensure the independence and the quality of official statistics and to oversee the compliance with international and national codes of practice.

The term "official statistics" (statistique publique) includes all material generated by statistical surveys, as specified in the list determined every year in a ruling by the Ministry for the Economy, and the use of data collected by government administrations, public or private bodies with a public service role for purposes of general information.

The design, production and dissemination of official statistics are conducted with full professional independence by the official statistical system, and by producers approved by the National Council for Statistical Information (CNIS) or the Official Statistics Authority (ASP).



Irish Statistical System Code of Practice:

In Ireland (\mathcal{O}), a code of practice for compilers of official statistics in the Irish Statistical System (ISS) has been introduced to assess national official statistics that are not part of European Statistics.

The CSO director develops a list of official statistics with each public body that produces statistics within the ISS. These statistics will be assessed against the Code. Only those statistics that are assessed as compliant with the Irish Statistical System Code of Practice (ISSCoP) will be designated as official statistics and may be published under the ISSCoP Logo.