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Items for discussion and decision: Fundamental Principles of Official Statistics

**Supplementary chapter to the Fundamental Principles of Official Statistics
Implementation Guidelines**

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Supplementary chapter to the Fundamental Principles of Official Statistics Implementation Guidelines

I. Introduction and background

This supplementary chapter provides criteria, in the form of a maturity model/framework, to assess compliance with the United Nations Fundamental Principles of Official Statistics (UNFPOS). Instead of assessing implementation just by ‘compliance’ or ‘non-compliance’, maturity models help organizations in several ways, including: gauging their level of compliance; identifying areas for development; providing pathways for continuous improvement; and guidance for standards to which national statistical organisations can aspire.

Using a maturity model to assess the level of compliance can: a) serve as a diagnostic tool that enables organizations to assess where their current capabilities lie in terms of the Fundamental Principles and, therefore, their current maturity level (descriptive); b) be used to identify desirable maturity levels and suggest actions to reach a desired maturity level (prescriptive); and c) serve as a comparative tool since it allows for external benchmarking among other organizations (comparative).

The Fundamental Principles enshrine the basic guiding principles of official statistics produced by national statistical offices and all entities that are part of the national statistical system. As such, they lay the foundation for the institutional set up and operation of official statistics and are of such a general and basic nature they may be referred to as the “basic law” or the “constitution” of official statistics.

Like other “constitutions”, the Fundamental Principles come to life and receive meaning only through their implementation and application. They have been supported by a variety of tools at the global and national level, including the good practices database¹, an implementation guide², and the Handbook of Statistical Organization³. In 2017, the Friends of the Chair Group on the Implementation of the Fundamental Principles of Official Statistics was mandated to conduct a global review of the implementation of the UNFPOS. This is a key mechanism for feedback on how implementation is progressing at the global level.

The Fundamental Principles were designed to be universal across cultures, political systems and time and are a pillar of the global statistical system. By expressing a profound conviction and commitment that official statistics have to adhere to well-defined professional and scientific standards, they define the professional community of official statisticians, reaching across political, economic and cultural borders.

II. Why is compliance important?

Coupled with any set of principles and implementation guidelines is the desire for an understanding of what compliance might look like and how it can be achieved.

In 2015, the attention of the United Nations Statistical Commission initially focused on country compliance with the UNFPOS; and subsequently explored ways to effectively address perceived UNFPOS non-compliance⁴. The discussion at that time

¹ <http://unstats.un.org/unsd/dnss/gp/searchgp.aspx>

² <http://unstats.un.org/unsd/dnss/gp/impguide.aspx>

³ <http://unstats.un.org/unsd/dnss/hb/searchhb.aspx>

⁴ <https://unstats.un.org/unsd/statcom/doc15/2015-18-FP-E.pdf>

noted the absence of definitions of compliance and non-compliance, leaving these definitions open to interpretation across different national and regional contexts. A shared, common understanding of compliance will assist to ensure less diversity of interpretation and more consistency, overall, in achieving compliance across the global statistical system.

There are significant benefits to implementing and achieving compliance with the UNFPOS to produce high quality, reliable and impartial official statistics.

Official statistics are a recognised part of the knowledge infrastructure for a country (and region) underpinning decisions by governments, businesses, communities, citizens and the international community; influencing investment choices; monitoring progress; and informing policy development and measuring its success.

Official statistics are also integral to good governance and meeting citizens' expectations of authoritative and trustworthy information about their country, informing debate and decisions on issues of national importance and monitoring the outcomes of those decisions.

Given the importance of high quality official statistics, building maturity in the application of the principles drives achievement towards a trusted, well-functioning statistical system.

III. Assessing compliance can take many forms

A. Self-assessment

Self-assessment has an important role in bringing compliance challenges into the open and promoting good practice. It is a good way to promote compliance and detect non-compliance⁵. Self-assessment also provides a mechanism to build capability and growth in maturity. For example, it could be an important aspect of internal organisational learning and development, helping to foster a culture of continuous improvement. Self-assessment, primarily through the regular global review of UNFPOS, should form the basis for evaluating the level of compliance and risks of non-compliance in the first instance.

B. Peer review

A peer review programme can complement self-assessment. Peer reviews can assess a country's capacity to produce and disseminate official statistics and form a view on their adherence or alignment to established standards/principles.

In official statistics, peer reviews have led to quality improvements in the institutional environment, statistical processes and statistical outputs. The reviews can also contribute to improving the image of official statistics as a useful and credible public good. They can be used to enhance the independence, integrity and accountability of the statistical organisation (Martín-Guzmán and Aguilera 2015)⁶. Peer reviews also enable the direct sharing of experience and good practices.

While establishing a global peer review programme is impractical, a more manageable option is for countries (or groups of countries) to invite independent peer review on a voluntary basis. Such processes have been used effectively in the European Union⁷. They could be helpful in supporting countries to understand how

⁵ <https://unstats.un.org/unsd/statcom/doc15/2015-18-FP-E.pdf>

⁶ http://www.oecd.org/iaos2018/programme/IAOS-OECD2018_Pohjola.pdf

⁷ <https://ec.europa.eu/eurostat/web/quality/peer-reviews>

they might improve their practices to build compliance and for highlighting good practice in specific cases.

The outcomes of peer reviews should be published publicly. For the process to work effectively there would need to be an open and transparent process to appoint peer review teams and agreed terms of reference for the remit of such reviews.

C. Accreditation

A third option for improving the implementation of the UNFPOS might be some form of certification or accreditation⁸, conferred on producers that exemplify sustained and consistent application of some or all of the principles. Certification would usually be based on the assessment of one or more independent third parties. There are practical challenges, especially time and cost, to this option and as such, the implementation of such a system can be reviewed in the future if there is a recognised need supported by countries. The process would require a proper assessment methodology and indicators.

Examples of such processes currently exist across the international statistical system, including the assessments on the implementation of the OECD Recommendation of the Council on Good Statistical Practice⁹ and the Global Assessments of national statistical systems conducted by the United Nations Economic Commission for Europe, jointly with Eurostat and the European Free Trade Association¹⁰.

IV. Assessing compliance with UNFPOS - a maturity approach

Whether an organisation assesses its compliance with UNFPOS by a self-assessment, a peer review or some other mechanism, it is useful to take a maturity assessment lens to compliance with UNFPOS implementation.

The concept of “maturity” seeks to capture an organization’s capability for self-improvement. A maturity model is designed to help statistical organizations gauge their current maturity, and to propose areas for improvement and further development. Essentially, it is a roadmap that helps assess and guide organizational practices.

This approach is structured as a series of levels of compliance, which begins with an assessment of current compliance. Once the current level is determined, the next level sets out what activities need to be prioritised to move to the next level or maintained to stay at the current level.

Maturity models are used across various professional disciplines including information management, security and communications and are becoming more prevalent in the world of official statistics. Examples of maturity models used in official statistics include the Modernisation Maturity Model¹¹ and the Communications Function Maturity Model¹².

⁸ <https://unstats.un.org/unsd/statcom/50th-session/documents/BG-Item3b-FPOS-Implementation-guidelines-E.pdf>

⁹ http://www.oecd.org/statistics/good-practice-toolkit/Brochure_Recommendation%20of%20the%20OECD%20Council%20on%20Good%20Statistical%20Practice%20March2019.pdf

¹⁰ <https://www.unece.org/statcoop/ga.html>

¹¹ <https://statswiki.unece.org/pages/viewpage.action?pageId=129172266>

¹² https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2019/7_Strategic_communication_framework_for_consultation.pdf

The following are the main applications of a maturity model:

- *Descriptive*: The maturity model serves as a diagnostic tool that enables organisations to assess where their current capabilities lie in terms of UNFPOS and, therefore, their current maturity level.
- *Prescriptive*: The maturity model can be used to identify desirable maturity levels. The model suggests actions to reach a desired maturity level.
- *Comparative*: The maturity model serves as a comparative tool since it allows for external benchmarking among other organizations.

A maturity model approach can be helpful in assessing compliance with the UNFPOS. The UNFPOS maturity model provides an assessment tool that can be used to assess current maturity against a standard framework. This tool can be used as part of self-assessments or peer reviews.

V. UNFPOS Maturity Model

The UNFPOS maturity model has several dimensions and levels. Each Fundamental Principle is represented as a dimension. Depending on the complexity of the principle, some have sub-dimensions. For each dimension or sub-dimension, organizations may have a different maturity level. The model includes three maturity levels – Developing, Practicing and Leading. ‘Developing’ is the least mature level and ‘Leading’ is the most mature.

The maturity levels were drawn from existing resources, including the UNFPOS Implementation guidelines, the Handbook on Statistical Organizations and the 2018 United Nations Global Assessment Survey¹³. They serve as familiar material, repackaged to provide guidance about compliance with the UNFPOS.

When using the maturity model, an organization should focus on identifying ways to continuously improve, rather than on attaining the highest maturity level. In other words, the purpose of a maturity model should not be to “tick the box”, with the aim to comply with the description of the highest maturity level, but to use it as a tool for achieving greater maturity over time. The maturity model can also be used as an aspirational guide, assisting organisations to continuously and incrementally improve their practices and develop organisational capability.

In line with the ‘continuous improvement’ maturity model concept, a range of reference material is available to support reaching a higher level of maturity. Once an assessment is complete and the current state of maturity is established, national statistical offices can draw on a range of resources to help them improve their current state and address areas of non-compliance.

In the sections below, each dimension is described, the relevant section of the maturity model is provided and supporting resources are suggested. Annex I contains the full maturity model.

A. Principle 1: Relevance, Impartiality and Equal Access

Description of dimension

“Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data

¹³ <https://unstats.un.org/unsd/statcom/50th-session/documents/BG-Item3b-FPOS-survey-results-E.pdf>

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."

Figure 1

	Developing	Practising	Leading
Principle 1: Relevance	Awareness of the importance of user consultation (e.g. investigate and document user needs, measure user satisfaction) to ensure that the statistical work program achieve that.	Regular consultation ensures user needs are considered in statistical work program development. This might include e.g. regular user meetings or use of online collaboration tools.	Statistical work programs are developed in partnership with users and reflect user needs. This might include e.g. sign-off of work program by a user council or similar external bodies.
	Users have limited access to data including online channels.	Users have access to data for exploration including online channels.	Users have full access to data for exploration and onward use including online channels.
	Data downloads are limited. Data are mostly released through print publications, online PDF files etc.	Data downloads available in propriety formats (Excel, Access, SAS, Stata, SPSS).	Data downloads available in open machine-readable formats (CSV, XML, JSON). Online APIs allow users to interact directly with statistical outputs.
	Users are not informed of upcoming data releases.	Release dates and times are pre-announced via a public advance release calendar.	Release dates and times are pre-announced via a public advance release calendar. Changes to release dates are published and the reasons for the change are documented and made public.

	Developing	Practising	Leading
Principle 1: Impartiality and Equal Access	There is limited clarity about the rules for the appointment and dismissal of the Chief Statistician.	There are clear rules for the appointment and dismissal of the Chief Statistician.	Rules for the appointment and dismissal of the Chief Statistician include specifics such as qualifications, selection procedure, length of appointment, reasons for dismissal.
	Pre-release of statistics occurs.	Pre-release of statistics to some user groups occurs.	There is equal access to statistics in principle. Pre-release of statistics is limited, controlled and transparent.
	Users have limited access to data free of charge.	Other than special analyses, data are free of charge.	Other than special analyses, data are free of charge. For statistical services which are charged, there is a clear pricing policy that is public.
	Statistics are not always free from political interference.	Statistics are compiled on an objective basis.	Statistics are compiled on an objective basis. Statistical releases and published statements including press releases are impartial and objective.
	The choice of data sources and statistical methods are not always free from political interference. Information about methods and procedures is not always available.	The choices of sources and statistical methods as well as dissemination of statistics are informed only by statistical considerations. Information on methods and procedures is publicly available.	The choice of sources and statistical methods as well as dissemination of statistics are informed only by statistical considerations and draw on recognised good practice, both nationally and internationally.
	Changes and revisions to methods or classifications are not publicized.	Changes and revisions to methods or classifications are made public, but advance notice is not given.	Information on methods and procedures is accessible, freely available to the public and written to support user understanding. Advance notice is given about changes and revisions to methods or classifications. Users are supported with clear advice on how changes and revisions feed through into effective use of the statistics.
	Internal procedures for error reporting and correcting are limited or not in place.	There are internal procedures for error reporting and correcting in place.	A clear revision policy is in place and published. Errors are corrected as soon as possible and publicized.
	Recruitment and promotion of staff is not always on an objective basis.	An effective, objective HR system is used to manage the appointment and promotion of staff in place.	Recruitment and promotion of the staff responsible for statistical information is through professional and open processes, based on aptitude and expertise.
Training provision for staff is limited.	Training is available for all staff.	Training programs are in place to identify, maintain and develop staff so that they have the skills they need to perform their tasks.	

Examples of resources related to the dimension

- UNECE Recommendations for Promoting, Measuring and Communicating the Value of Official Statistics: <https://www.unece.org/index.php?id=51139>
- UNECE Guidelines for Managers: <https://statswiki.unece.org/display/GFM/Guidelines+for+Managers>
- Eurostat's Annual user satisfaction survey of Eurostat and user surveys conducted by national statistical agencies: https://ec.europa.eu/eurostat/c/portal/layout?p_1_id=64251&p_v_1_s_g_id=0

B. Principle 2: Professional Standards, Scientific Principles and Professional Ethics

Description of dimension

“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.”

Figure 2

	Developing	Practising	Leading
Principle 2	Awareness of need to align statistical methodologies with international best practice where they exist.	Most statistical methodologies use internationally recommended standards and methods where they exist.	Statistical methodologies use internationally recommended standards and methods where they exist.
	Guidelines on professional ethics exist (for example in the statistical legislation or in organizational policy).	Training on professional ethics exists.	Regular training and reminders on professional ethics are provided to staff. There is published guidance on the ethical production and use of statistics. There is independent assessment of ethical use of data and statistics and findings are published.
	Awareness that peer or expert reviews will add value	Actively seeks peer or expert reviews	A group of experts (for example an independent methodological council) advises and/or endorses methods used.
	Awareness of the benefit of consistent use of standards across national statistical system	Promotes consistent use of standards across national statistical system	Assists the national statistical system with use of standards and methods (for example, external monitoring or auditing of practices, approving questionnaires).

Examples of resources related to the dimension

- PARIS21’s Improving national statistical systems: the role of peer reviews:
<https://paris21.org/sites/default/files/2019-05/DP%20-%2016%20Peer%20Reviews%20-%20WEB.pdf>
- International Statistical Institute’s Professional Ethics resources:
<https://www.isi-web.org/index.php/about-isi/policies/professional-ethics>
- American Statistical Association’s Ethical guidelines for Statistical Practice:
<https://www.amstat.org/ASA/Your-Career/Ethical-Guidelines-for-Statistical-Practice.aspx>
- Statistics New Zealand’s Data Ethics Advisory Group:
<https://data.govt.nz/about/government-chief-data-steward-gcnds/data-ethics-advisory-group/>
- Statistics Finland’s Guidelines of Professional Ethics :
http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/yksk30c_201400_2014_12560_net.pdf
- UK Statistics Authority National Statistician’s Data Ethics Advisory Committee:
<https://www.statisticsauthority.gov.uk/about-the-authority/committees/nsdec/>
- Building confidence in the handling and use of data:
<https://www.statisticsauthority.gov.uk/publication/guidance-data-governance/>

C. Principle 3: Accountability and Transparency

Description of dimension

“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.”

Figure 3

	Developing	Practising	Leading
Principle 3	Explanatory text or methodological notes are provided with data.	There are frameworks and standards for statistical production and quality reporting and these are publicly available.	There are clear processes and policies for reporting on quality and methods. They are publicly available and align with international best practice.
	Information about statistical quality is limited or unavailable.	Quality information is provided as part of metadata.	Quality reports are always available with data releases. Guides supporting users to help them interpret data are available.
	There is limited information about changes in methods or corrections	Users are notified of major methodological changes and error corrections.	Users are always notified about methodological changes and error corrections. There are clear processes and policies for reporting and these are publicly available.

Examples of resources related to the dimension

- Australian Bureau of Statistics’ Webpage on Methods, Standards and Classifications:
<https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Methods,+Classifications,+Concepts+&+Standards?opendocument#from-banner=GT>
- National Statistical Institute of Spain’s Webpage on Quality in the INE and Code of Practice:
https://www.ine.es/ss/Satellite?L=en_GB&c=Page&cid=1259943453642&p=1259943453642&pagename=MetodologiaYEstandares%2FINELayout
- United Nations National Quality Assurance Frameworks Manual for Official Statistics (UN NQAF Manual):
<https://unstats.un.org/unsd/methodology/dataquality/un-nqaf-manual/>
- UK Office of National Statistics example of a background quality report:
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/methodologies/annualmidyearpopulationestimatesqmi>

D. Principle 4: Prevention of misuse

Description of dimension

“The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.”

Figure 4

	Developing	Practising	Leading
Principle 4	The National Statistical Office has no policy for intervention on erroneous interpretation and misuse of statistics	The National Statistical Office or equivalent body has a policy on how it will intervene on erroneous interpretation and misuse of statistics	The National Statistical Office or equivalent body has a public policy on how it will intervene on erroneous interpretation and misuse of statistics
	The National Statistical Office does not comment on erroneous interpretation and misuse of statistics.	The National Statistical Office may comment on erroneous interpretation and misuse of statistics.	The National Statistical Office or equivalent body comments publicly and regularly on erroneous interpretation, misuse or unclear presentation of statistics. This might include impartial cooperation with the media, independent fact checking organisations or similar.
	Resources on the responsible use of statistics are limited and training is infrequent.	There is some training and guidance on the responsible use of statistics to prevent erroneous interpretation and misuse.	There is timely comprehensive training and published guidance on the responsible use of statistics to prevent erroneous interpretation and misuse.

Examples of resources related to the dimension

- UNECE Making Data Meaningful Part 4: How to improve statistical literacy: A guide for statistical organizations:
https://www.unece.org/fileadmin/DAM/stats/publications/2013/Making_Data_Meaningful_4.pdf
- UK Office of National Statistics’ free guidance for analysts and users of statistics: <https://gss.civilservice.gov.uk/guidances/communicating-statistics/#guidance>

- The UK Statistics Authority comments publicly on the appropriate use of statistics and all correspondence is published. See for example: <https://www.statisticsauthority.gov.uk/correspondence/statements-on-nhs-funding/> and <https://www.statisticsauthority.gov.uk/correspondence/comparability-of-rough-sleeping-statistics/>
- Statistics Lithuania: Policy to intervene publicly on statistical issues in cases of criticism, misuses or misinterpretation of official statistics in the media is defined in the Rules for the Dissemination of Statistical Information: <http://www.stat.gov.lt/en/oficialiosios-statistikos-sklaidos-politika>

E. Principle 5: Sources of Official Statistics

Description of dimension

“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.”

Figure 5

	Developing	Practising	Leading
Principle 5	Data is drawn from a limited set of sources. Little use is made of relevant administrative or commercial data.	Administrative records, statistical registers and third party data sources are used where appropriate.	Administrative records, statistical registers and other data sources are used whenever appropriate to improve the quality and coverage of official statistics. Appropriate governance and data policies are used to manage data use.
	There is limited or no liaison with data suppliers outside the National Statistical Office.	Relationships with data suppliers are in place. Activities with data suppliers include advice on amending the composition and classification of administrative datasets, and feedback when errors are detected.	New or alternative data sources are actively investigated for opportunities to improve the quality and coverage of official statistics.
	Coherence and consistency across statistics from different agencies and offices are not addressed.	Coherence and consistency of statistics is coordinated across some departments and agencies.	Coherence and consistency are recognized priorities for the statistical system. There is strategic oversight of coherence and consistency across statistical data sources. Governance is in place to promote and ensure coherence.
	There is limited or no oversight of how statistical concepts and resources are used across agencies and departments.	The importance of harmonized standards is recognized. There is some guidance on harmonization.	Statistical concepts and resources are harmonized across producers wherever possible and there are central resources to support producers in harmonizing their outputs.

Examples of resources related to the dimension

- UN National Data Quality Frameworks Manual for Official Statistics: <https://unstats.un.org/unsd/methodology/dataquality/>
- UNECE Guidelines on the use of statistical business registers for business demography and entrepreneurship statistics: <https://www.unece.org/index.php?id=51127>
- UNECE Guidelines on the use of registers and administrative data for population and housing censuses (December 2018): <https://www.unece.org/index.php?id=50794>
- UNECE paper on “What does Big Data mean for official statistics?”: <https://statswiki.unece.org/pages/viewpage.action?pageId=77170614>
- UNECE Guide to Data Integration for Official Statistics: <https://statswiki.unece.org/display/DI/Guide+to+Data+Integration+for+Official+Statistics>
- Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European Statistics⁸. Article 24 – Access to Administrative

Records and legal tools CoP 8.1, 8.7, 8.8, 8.9 related to appropriate statistical procedures: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:087:0164:0173:En:PDF>

- Statistics New Zealand’s Integrated Data Infrastructure: <https://www.stats.govt.nz/integrated-data/>

F. Principle 6: Confidentiality

Description of dimension

“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.”

Figure 6

	Developing	Practising	Leading
Principle 6	A confidentiality policy is in place.	A confidentiality policy (including guidelines and instructions) is in place.	A comprehensive confidentiality policy (including guidelines and instructions) is in place.
	The confidentiality policy is provided to staff.	The confidentiality policy outlines mechanisms to guarantee the privacy of data. The confidentiality policy is provided to staff and is made publicly available.	The confidentiality policy outlines mechanisms to guarantee the privacy of data at each stage of the statistical process – from the preparation of surveys up to the dissemination of statistical products. The confidentiality policy is provided to staff and is made publicly available.
	There are limited additional requirements for staff with access to confidential or personal data.	Staff with access to individual or confidential information must sign a confidentiality commitment on appointment.	Staff with access to individual or confidential information must sign a confidentiality commitment on appointment. There is training in place to ensure responsible access to confidential and personal information.
	Conditions apply to users accessing statistical microdata for research purposes, but they are not consistently applied.	Established appropriate confidentiality procedures and processes take place before researchers have access to microdata.	Strict conditions apply to users accessing statistical microdata for research purposes. The conditions and processes required are publicly available. Researcher’s use of microdata is monitored in order to immediately apply corrective actions.
	Basic physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases.	Physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases. These draw on relevant international best practice.	Sophisticated and modern physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases. These follow relevant international best practice and are independently audited.

Examples of resources related to the dimension

- UNECE Managing Statistical Confidentiality and Microdata Access - Principles and Guidelines of Good Practice: http://live.unecce.org/fileadmin/DAM/stats/publications/Managing_statistical_confidentiality_and_microdata_access.pdf
- Statistics Netherlands privacy page: <https://www.cbs.nl/en-gb/about-us/organisation/privacy>
- INSEE’s guide to Statistical Confidentiality: <https://www.insee.fr/en/information/2388575>
- Central Statistics Office of Ireland’s Data policies: <https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/>
- UK Office for National Statistics policies and frameworks on using data for the public benefit: <https://www.ons.gov.uk/aboutus/transparencyandgovernance/lookingafterandusingdataforpublicbenefit>

G. Principle 7: Legislation

Description of dimension

“The laws, regulations and measures under which the statistical systems operate are to be made public.”

Figure 7

	Developing	Practising	Leading
Principle 7	A general statistics law exists.	The statistical law and associated regulations address most of the following elements: <ul style="list-style-type: none"> • main principles and definitions of official statistics • organisation of 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 	The statistical law and associated regulations address all of the following elements: <ul style="list-style-type: none"> • main principles and definitions of official statistics • organisation of 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
	Laws, regulations and measures for statistics are not easily discoverable. Public availability is limited.	The laws, regulations and measures are easily discoverable and available to the public.	The laws, regulations and measures are easily discoverable and available to the public.

Examples of resources related to the dimension

- UNECE Guidance on Modernizing Statistical Legislation: <http://www.unece.org/index.php?id=51141>
- UNECE Generic Law on Official Statistics: <https://www.unece.org/index.php?id=45114>

H. Principle 8: National Co-ordination

Description of dimension

“Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.”

Figure 8

	Developing	Practising	Leading
Principle 8	Awareness that statistical coordination is required, but limited scope to achieve it.	There is some coordination across statistical producers. There are frameworks in place to formalise coordination.	Statistical coordination is cross-system, so that all national producer bodies work together to ensure coherence and take a unified approach.
	Governance for statistics is split across different organisations.	Statistical governance is coordinated, but there is limited or no centralization.	The National Statistical Office is recognized and valued as the lead body for strategic decisions about statistical coordination. There are agreed frameworks in place that set out how statistical governance should operate across the system.

Examples of resources related to the dimension

- Compendium of Management Practices for Statistical Organizations from Statistics Canada's International Statistical Fellowship Program <https://www150.statcan.gc.ca/n1/pub/11-634-x/11-634-x2016001-eng.htm>

- Paris21’s NSS Assessment guide: <https://paris21.org/news-center/news/release-new-nss-assessment-guide>
- UK National Data Strategy: <https://www.gov.uk/guidance/national-data-strategy>
- Statistics New Zealand’s Principles and Protocols for Producers of Tier 1 Statistics: <https://www.stats.govt.nz/assets/Uploads/Principles-and-protocols-for-producers-of-tier-1-stats/principles-and-protocols-for-producers-of-tier-1-stats.pdf>
- Data strategy and roadmap: setting the new direction for New Zealand’s data: <https://www.data.govt.nz/about/data-strategy-and-roadmap-setting-the-direction-for-new-zealands-data/>

I. Principle 9: Use of international standards

Description of dimension

“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.”

Figure 9

	Developing	Practising	Leading
Principle 9	The main international concepts, classifications and methods for the development, production and dissemination of official statistics are used.	International concepts, classifications and methods for the development, production and dissemination of official statistics are used and new versions are implemented where appropriate.	International concepts, classifications and methods for the development, production and dissemination of official statistics are used and new versions are implemented where appropriate.
	Awareness that use of international standards should be promoted in the national statistical system, but limited scope to achieve it.	Use of international standards are promoted in the national statistical system.	Use of international standards are actively promoted in the national statistical system. Participation in the development of international standards is supported.

Examples of resources related to the dimension

- UN Classification pages: <https://unstats.un.org/unsd/classifications/>
- Generic Statistical Business Process Model: <https://statswiki.unece.org/display/GSBPM/Generic+Statistical+Business+Process+Model?src=sidebar>
- Generic Statistical Information Model: <https://statswiki.unece.org/display/gsim>
- United Nations National Quality Assurance Frameworks Manual for Official Statistics (UN NQAF Manual) <https://unstats.un.org/unsd/methodology/dataquality/un-nqaf-manual/>
- UN Integrated Geospatial Information Framework: <https://ggim.un.org/IGIF/>
- The System of Environmental-Economic Accounting (SEEA): <http://unstats.un.org/unsd/envaccounting/seea.asp>
- The System of National Accounts (SNA): <http://unstats.un.org/unsd/nationalaccount/sna.asp>

J. Principle 10: International cooperation

Description of dimension

“Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.”

Figure 10

	Developing	Practising	Leading
Principle 10	Participation in the main international and regional statistical discussion forums.	Active participation in international and regional statistical discussion forums.	Continuous improvement of statistics at the international level is recognised as a priority and resources are available to support this. Donor coordination mechanisms or basket funds for statistics exist (among countries receiving support from donors).

Examples of resources related to the dimension

- Statistics Canada’s International Cooperation activities:
<https://www.statcan.gc.ca/eng/about/cooperation>
- Statistics Sweden’s International Cooperation activities:
<https://www.scb.se/en/About-us/international-statistics-cooperation/>
- Agreements with EU enlargement countries: <http://ec.europa.eu/enlargement>
- United Nations Economic and Social Commission for Asia and the Pacific:
<https://www.unescap.org/our-work/statistics>
- United Nations Economic and Social Commission for Western Asia:
<https://www.unescwa.org/our-work/statistics>
- United Nations Economic Commission for Africa:
<https://www.cepal.org/en/work-areas/statistics>
- United Nations Economic Commission for Latin America and the Caribbean:
<https://www.cepal.org/en/work-areas/statistics>
- United Nations Economic Commission for Europe:
http://www.unece.org/stats/stats_h.html

Annex I

UNFPOS maturity model

	Developing	Practising	Leading
Principle 1: Relevance	Awareness of the importance of user consultation (e.g. investigate and document user needs, measure user satisfaction) to ensure that the statistical work program achieve that.	Regular consultation ensures user needs are considered in statistical work program development. This might include e.g. regular user meetings or use of online collaboration tools.	Statistical work programs are developed in partnership with users and reflect user needs. This might include e.g. sign-off of work program by a user council or similar external bodies.
	Users have limited access to data including online channels.	Users have access to data for exploration including online channels.	Users have full access to data for exploration and onward use including online channels.
	Data downloads are limited. Data are mostly released through print publications, online PDF files etc.	Data downloads available in propriety formats (Excel, Access, SAS, Stata, SPSS).	Data downloads available in open machine-readable formats (CSV, XML, JSON). Online APIs allow users to interact directly with statistical outputs.
	Users are not informed of upcoming data releases.	Release dates and times are pre-announced via a public advance release calendar.	Release dates and times are pre-announced via a public advance release calendar. Changes to release dates are published and the reasons for the change are documented and made public.
	Developing	Practising	Leading
Principle 1: Impartiality and Equal Access	There is limited clarity about the rules for the appointment and dismissal of the Chief Statistician.	There are clear rules for the appointment and dismissal of the Chief Statistician.	Rules for the appointment and dismissal of the Chief Statistician include specifics such as qualifications, selection procedure, length of appointment, reasons for dismissal.
	Pre-release of statistics occurs.	Pre-release of statistics to some user groups occurs.	There is equal access to statistics in principle. Pre-release of statistics is limited, controlled and transparent.
	Users have limited access to data free of charge.	Other than special analyses, data are free of charge.	Other than special analyses, data are free of charge. For statistical services which are charged, there is a clear pricing policy that is public.
	Statistics are not always free from political interference.	Statistics are compiled on an objective basis.	Statistics are compiled on an objective basis. Statistical releases and published statements including press releases are impartial and objective.
	The choice of data sources and statistical methods are not always free from political interference. Information about methods and procedures is not always available.	The choices of sources and statistical methods as well as dissemination of statistics are informed only by statistical considerations. Information on methods and procedures is publicly available.	The choice of sources and statistical methods as well as dissemination of statistics are informed only by statistical considerations and draw on recognised good practice, both nationally and internationally.
	Changes and revisions to methods or classifications are not publicized.	Changes and revisions to methods or classifications are made public, but advance notice is not given.	Information on methods and procedures is accessible, freely available to the public and written to support user understanding. Advance notice is given about changes and revisions to methods or classifications. Users are supported with clear advice on how changes and revisions feed through into effective use of the statistics.
	Internal procedures for error reporting and correcting are limited or not in place.	There are internal procedures for error reporting and correcting in place.	A clear revision policy is in place and published. Errors are corrected as soon as possible and publicized.
	Recruitment and promotion of staff is not always on an objective basis.	An effective, objective HR system is used to manage the appointment and promotion of staff in place.	Recruitment and promotion of the staff responsible for statistical information is through professional and open processes, based on aptitude and expertise.
Training provision for staff is limited.	Training is available for all staff.	Training programs are in place to identify, maintain and develop staff so that they have the skills they need to perform their tasks.	
	Developing	Practising	Leading
Principle 2	Awareness of need to align statistical methodologies with international best practice where they exist.	Most statistical methodologies use internationally recommended standards and methods where they exist.	Statistical methodologies use internationally recommended standards and methods where they exist.
	Guidelines on professional ethics exist (for example in the statistical legislation or in organizational policy).	Training on professional ethics exists.	Regular training and reminders on professional ethics are provided to staff. There is published guidance on the ethical production and use of statistics. There is independent assessment of ethical use of data and statistics and findings are published.
	Awareness that peer or expert reviews will add value	Actively seeks peer or expert reviews	A group of experts (for example an independent methodological council) advises and/or endorses methods used.
	Awareness of the benefit of consistent use of standards across national statistical system	Promotes consistent use of standards across national statistical system	Assists the national statistical system with use of standards and methods (for example, external monitoring or auditing of practices, approving questionnaires).

	Developing	Practising	Leading
Principle 3	Explanatory text or methodological notes are provided with data.	There are frameworks and standards for statistical production and quality reporting and these are publicly available.	There are clear processes and policies for reporting on quality and methods. They are publicly available and align with international best practice.
	Information about statistical quality is limited or unavailable.	Quality information is provided as part of metadata.	Quality reports are always available with data releases. Guides supporting users to help them interpret data are available.
	There is limited information about changes in methods or corrections	Users are notified of major methodological changes and error corrections.	Users are always notified about methodological changes and error corrections. There are clear processes and policies for reporting and these are publicly available.
	Developing	Practising	Leading
Principle 4	The National Statistical Office has no policy for intervention on erroneous interpretation and misuse of statistics	The National Statistical Office or equivalent body has a policy on how it will intervene on erroneous interpretation and misuse of statistics	The National Statistical Office or equivalent body has a public policy on how it will intervene on erroneous interpretation and misuse of statistics
	The National Statistical Office does not comment on erroneous interpretation and misuse of statistics.	The National Statistical Office may comment on erroneous interpretation and misuse of statistics.	The National Statistical Office or equivalent body comments publicly and regularly on erroneous interpretation, misuse or unclear presentation of statistics. This might include impartial cooperation with the media, independent fact checking organisations or similar.
	Resources on the responsible use of statistics are limited and training is infrequent.	There is some training and guidance on the responsible use of statistics to prevent erroneous interpretation and misuse.	There is timely comprehensive training and published guidance on the responsible use of statistics to prevent erroneous interpretation and misuse.
	Developing	Practising	Leading
Principle 5	Data is drawn from a limited set of sources. Little use is made of relevant administrative or commercial data.	Administrative records, statistical registers and third party data sources are used where appropriate.	Administrative records, statistical registers and other data sources are used whenever appropriate to improve the quality and coverage of official statistics. Appropriate governance and data policies are used to manage data use.
	There is limited or no liaison with data suppliers outside the National Statistical Office.	Relationships with data suppliers are in place. Activities with data suppliers include advice on amending the composition and classification of administrative datasets, and feedback when errors are detected.	New or alternative data sources are actively investigated for opportunities to improve the quality and coverage of official statistics.
	Coherence and consistency across statistics from different agencies and offices are not addressed.	Coherence and consistency of statistics is coordinated across some departments and agencies.	Coherence and consistency are recognized priorities for the statistical system. There is strategic oversight of coherence and consistency across statistical data sources. Governance is in place to promote and ensure coherence.
	There is limited or no oversight of how statistical concepts and resources are used across agencies and departments.	The importance of harmonized standards is recognized. There is some guidance on harmonization.	Statistical concepts and resources are harmonized across producers wherever possible and there are central resources to support producers in harmonizing their outputs.
	Developing	Practising	Leading
Principle 6	A confidentiality policy is in place.	A confidentiality policy (including guidelines and instructions) is in place.	A comprehensive confidentiality policy (including guidelines and instructions) is in place.
	The confidentiality policy is provided to staff.	The confidentiality policy outlines mechanisms to guarantee the privacy of data. The confidentiality policy is provided to staff and is made publicly available.	The confidentiality policy outlines mechanisms to guarantee the privacy of data at each stage of the statistical process – from the preparation of surveys up to the dissemination of statistical products. The confidentiality policy is provided to staff and is made publicly available.
	There are limited additional requirements for staff with access to confidential or personal data.	Staff with access to individual or confidential information must sign a confidentiality commitment on appointment.	Staff with access to individual or confidential information must sign a confidentiality commitment on appointment. There is training in place to ensure responsible access to confidential and personal information.
	Conditions apply to users accessing statistical microdata for research purposes, but they are not consistently applied.	Established appropriate confidentiality procedures and processes take place before researchers have access to microdata.	Strict conditions apply to users accessing statistical microdata for research purposes. The conditions and processes required are publicly available. Researcher's use of microdata is monitored in order to immediately apply corrective actions.
	Basic physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases.	Physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases. These draw on relevant international best practice.	Sophisticated and modern physical, technological and organizational provisions are in place to protect the security and integrity of statistical databases. These follow relevant international best practice and are independently audited.

	Developing	Practising	Leading
Principle 7	A general statistics law exists.	The statistical law and associated regulations address most of the following elements: <ul style="list-style-type: none"> • main principles and definitions of official statistics • organisation of 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 	The statistical law and associated regulations address all of the following elements: <ul style="list-style-type: none"> • main principles and definitions of official statistics • organisation of 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
	Laws, regulations and measures for statistics are not easily discoverable. Public availability is limited.	The laws, regulations and measures are easily discoverable and available to the public.	The laws, regulations and measures are easily discoverable and available to the public.
	Developing	Practising	Leading
Principle 8	Awareness that statistical coordination is required, but limited scope to achieve it.	There is some coordination across statistical producers. There are frameworks in place to formalise coordination.	Statistical coordination is cross-system, so that all national producer bodies work together to ensure coherence and take a unified approach.
	Governance for statistics is split across different organisations.	Statistical governance is coordinated, but there is limited or no centralization.	The National Statistical Office is recognized and valued as the lead body for strategic decisions about statistical coordination. There are agreed frameworks in place that set out how statistical governance should operate across the system.
	Developing	Practising	Leading
Principle 9	The main international concepts, classifications and methods for the development, production and dissemination of official statistics are used.	International concepts, classifications and methods for the development, production and dissemination of official statistics are used and new versions are implemented where appropriate.	International concepts, classifications and methods for the development, production and dissemination of official statistics are used and new versions are implemented where appropriate.
	Awareness that use of international standards should be promoted in the national statistical system, but limited scope to achieve it.	Use of international standards are promoted in the national statistical system.	Use of international standards are actively promoted in the national statistical system. Participation in the development of international standards is supported.
	Developing	Practising	Leading
Principle 10	Participation in the main international and regional statistical discussion forums.	Active participation in international and regional statistical discussion forums.	Continuous improvement of statistics at the international level is recognised as a priority and resources are available to support this. Donor coordination mechanisms or basket funds for statistics exist (among countries receiving support from donors).