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Session 1.1: Introduction to the UN NQAF Manual and its recommendations

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The United Nations National Quality Assurance Frameworks Manual for Official Statistics was adopted by the Statistical Commission of the Economic and Social Council of the United Nations in March 2019, and welcomed as an important contribution for guiding countries in the implementation of a national quality assurance framework, including for new data sources, new data providers, and data and statistics on the Sustainable Development Goal indicators.


The Manual is intended for use by anyone interested in or working on quality assurance of official statistics.
The *Manual* was developed by the Expert Group on National Quality Assurance Frameworks (EG-NQAF) which has been re-established by the Statistical Commission at its 48th session in March 2017.

17 countries and 8 international and regional organizations joined the re-established Expert Group on National Assurance Quality Frameworks in 2017.

Objectives

- The *Manual* provides guidance for developing and implementing a national quality assurance framework (NQAF)

- Aims at assuring the quality of official statistics throughout the entire national statistical system (NSS)

- Provides guidance for the engagement with statistics producers and data providers that are outside of the NSS that cooperate with NSS members in the production of official statistics
  
  - The *Manual* is responding to the new data ecosystem with new data sources, data providers and statistics producers aiming at safeguarding the role of official statistics as trusted source of information in a changing environment.

  - For example, in the future, national statistical offices (NSOs) may see their role as producer of official statistics diminished while adopting a new role as curator of data and statistics produced by others.
Note:
The Manual does not aim to replace any of the existing statistical quality assurance frameworks and guidelines for official statistics.

Countries and individual producers of official statistics that are already fully engaged in quality assurance and are following one of the existing quality frameworks may view this Manual only as an additional reference point that supports what they are already doing, and a source of information on the application of quality assurance in different situations.
The *Manual* aims to support countries in...

- NQAF development
- Implementation at the NSO
- Implementation throughout the NSS
- Application to expanded data ecosystem

..through

⇒ Recommendations
⇒ UN NQAF
⇒ Implementation guidance
The Manual overview

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See [https://unstats.un.org/unsd/methodology/dataquality/](https://unstats.un.org/unsd/methodology/dataquality/)
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Uses of the Manual

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All chapters of the Manual can be read independently, hereby offering different entry points.
...questions?

*Please note that Chapter 1 contains useful working definitions of important terms such as “data providers and statistics producers”, “national statistical system” etc.*
Some important terms to be noted...

- Data and statistics
- Data providers and statistics producers
- National statistical system – responsible for official statistics
  - NSS = National statistical office (NSO) + Other producers of official statistics (= statistical agencies)
  - Other statistics producers are not part of NSS
- Data ecosystem, Official statistics, Open data etc.
Chapter 2. United Nations Recommendations on quality assurance for official statistics

Scope

The recommendations apply to the National Statistical System (NSS) comprised of the NSO and other producers of official statistics (other statistical agencies).

However, under specific circumstances, as established by countries, the recommendations are proposed to be used by other statistics producers and providers of data that do not produce official statistics and that are not part (or frequently not considered part) of the NSS.
Overarching Core Recommendations

#1 Integrate the Fundamental Principles of Official Statistics in the legal and institutional frameworks

#2 Include the requirement for quality assurance in the statistical legislation

#3 Establish a national quality assurance framework (NQAF); all members of the national statistical system (NSS) commit to quality assurance

#4 Base or align your NQAF with international or regional quality frameworks

#5 Implement NQAF at the NSO, throughout the NSS and to data and statistics produced outside the NSS as appropriate
Recommendations that aim at the implementation of specific Fundamental Principles of Official Statistics

❖ The recommendations #6 to #14 provide an interpretation of the Fundamental Principles of Official Statistics (FPOS) to facilitate their implementation and to stress their importance in the context of statistical quality assurance.

❖ They are directly derived from one or two FPOS or a repetition of one of its principles.

UN NQAF arranges its quality principles and associated requirements into four levels, ranging from the over-arching institutional and cross-institutional level through the statistical production processes to the outputs:

- Level A: Managing the statistical system
- Level B: Managing the institutional environment
- Level C: Managing statistical processes
- Level D: Managing statistical outputs
Chapter 4. Assessment tools and risk management

❖ Methods and tools for statistical quality assessment comprise

- quality indicators (both for products and processes)
- quality reports
- user surveys
- self and external assessments
- auditing (internal or external quality reviews), including peer reviews
- labelling and certification.

❖ Metadata management

❖ Risk management
Chapters 5 & 6: Development and implementation of a national quality assurance framework

**Chapter 5 Development and Implementation of NQAF at individual NSS members**

- **Phase 1: Establishing the ‘basics’** (5.A)  
  (A reminder, or short introduction for newcomers)

- **Phase 2: Development and Adoption** (5.B)  
  (For readers that do not have an NQAF already)

- **Phase 3: Implementation at the NSO and other producers of official statistics** (5.C)  
  (Relevant to all readers)

**Chapter 6 Implementation of quality assurance within the NSS**  
(For readers that are concerned with implementing NQAF throughout the NSS)

- **Coordination of the NSS** (6.A)

- **Role of the NSS-wide bodies in NQAF implementation** (6.B)

- **Implementation of system-wide measures – introducing all NSS members to quality assurance** (6.C)
Chapter 7. Quality assurance for statistics compiled from different data sources

- This chapter highlights certain aspects of quality assurance that are specific, or are of special importance, to statistics that are produced (completely or partially) using specific data sources.

- This Manual distinguishes three data sources according to their purpose and by the entity responsible for their compilation.

  - Statistical data sources
  - Administrative data sources
  - Other data sources (list included)

- Discusses big data, new data sources and use of multiple sources
Chapter 8: Quality assurance of SDG indicators

❖ Challenges of assuring quality of data and statistics for the SDG indicators
❖ Roles of the different entities participating in this task
❖ Requirements and elements to be assured that are of special importance, differentiated by the four levels:
  ❑ Managing the NSS
  ❑ Managing the statistical environment
  ❑ Managing the statistical processes
  ❑ Managing statistical outputs
Chapter 9: Quality assurance in the global statistical system

❖ The target audience of this chapter are statisticians in countries and regional and international organizations that are interested in the relationship between national and global statistics.

❖ Provides references regarding the commitments and obligations of countries and international and regional organizations to jointly assure the quality of data and statistics published at the global level.

❖ It is recommended to address disputes based on applicable professional standards, i.e. commitments and obligations.