Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Africa Region

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Session 1.2: Introduction to the UN NQAF Manual and its recommendations

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The new United Nations National Quality Assurance Frameworks Manual for Official Statistics
(UN NQAF Manual / the *Manual*)

❖ Developed by the Expert Group on National Quality Assurance Frameworks (EG-NQAF) which has been re-establishment by the Statistical Commission at its 48th session in March 2017.

❖ Adopted by the Statistical Commission at its 50th session in March 2019.

Note: The *Manual* builds on and replaces the generic United Nations National Quality Assurance Framework template and guidelines (UN NQAF template and guidelines) adopted in 2012.

UN NQAF Manual – Process of development

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

❑ Survey of national practices in November 2017 which informed its work.

❑ Many countries updated the information about their national practices on the UNSD website at https://unstats.un.org/unsd/methodology/dataquality/quality-references/.)

❑ In November 2018, the draft of the UN NQAF Manual was sent for worldwide consultation and review to all Member States: More than 60 countries and three international/regional organizations provided their feedback and feedback and comments were incorporated as much as possible.

Expert Group on National Assurance Quality Frameworks

❑Current membership of the EG-NQAF:

- Canada (previous co-Chair), Chile, China, Colombia, Egypt, Indonesia, Iran, Italy (co-Chair), Jamaica, Japan, Mexico, Niger, Norway, Philippines (co-Chair), South Africa, Ukraine, Viet Nam,

- the Food and Agriculture Organization of the United Nations (FAO), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the World Bank, the Economic Commission for Africa (ECA), the Economic Commission for Europe (ECE), the Economic Commission for Latin America and the Caribbean (ECLAC) and the Economic and Social Commission for Asia and the Pacific (ESCAP).

- Recent joined: Botswana, Cameroon, Russian Federation, United Kingdom, Statistical Office of the European Community (Eurostat)

❑EG-NQAF will develop and provide additional materials and tools to support the implementation of a national quality assurance framework in countries, including best practices.

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

o 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.

o 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.

Objectives

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..

Application to expanded data ecosystem

Implementation throughout the NSS

Implementation at the NSO

NQAF development

..through
$\Rightarrow$ Recommendations
$\Rightarrow$ UN NQAF
$\Rightarrow$ Implementation guidance

…questions?

Structure of the *Manual*

Part	Chapter	Title
Introduction	Chapter 1	Contents and use of this Manual
Recommendations	Chapter 2	Recommendations on quality assuarance for official statistics
UN NQAF	Chapter 3	The UN National Quality Assurance Framework: principles and requirements
Implementation	Chapter 4	Assessment tools and risk management
	Chapter 5	Development and implementation of a national quality assurance framework
	Chapter 6	Implementation of quality assurance within the national statistical system
	Chapter 7	Quality assuarance for statistics compiled from different data sources
	Chapter 8	Quality assuarance for SDG indicator data and statistics
References	Chapter 9	Quality assurance in the global statistical system
UN NQAF Annex	Annex A	Detailed Checklist of elements to be assured

Uses of the *Manual*

Task	Manual part
Achieving an adequate mandate	Chapter 2
Developing NQAF	Chapter 5
Adopting or adapting framework for country needs	Chapter 3 and Annex A
Finding proper tools and instruments for NQAF implementation	Chapter 4
NQAF Implementation at the NSO	Chapter 5
NQAF implementation throughout the NSS	Chapter 6
Assuring quality for statistics from different data sources	Chapter 7
Addressing quality assurance for SDG indicators	Chapter 8
Finding references on quality assurance in the global statistical system (including the need for international comparability, especially for SDG indicators)	Chapter 9

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UN NQAF Annex	Annex A	Detailed Checklist of elements to be assured

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

…questions?

…in addition, please note that Chapter 1 contains useful working definitions of important terms such as "data providers and statistics producers", "national statistical system" etc.

Chapter 2. United Nations Recommendations on quality assurance for official statistics

Overarching Core Recommendations

#1 Integrate the Fundamental Principles of Offical 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 national statistical system (NSS) members are to 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

Chapter 2. United Nations Recommendations on quality assurance for official statistics

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.**

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 <u>other producers of official statistics</u> (other statistical agencies).

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

…questions?

Please note:

The United Nations National Quality Assurance Framework (UN NQAF) of Chapter 3 is descriptive. However, FPOS and the associated recommendations of Chapter 2 support specific principles and give them an obligatory character.

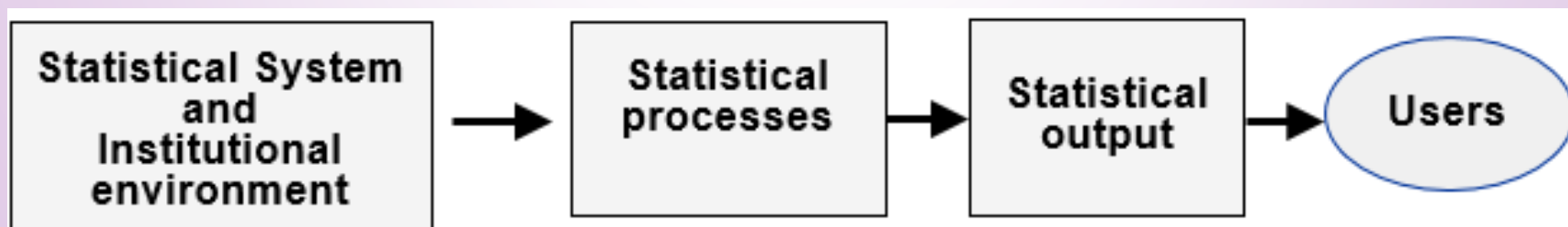# Chapter 3 and Annex: United Nations National Quality Assurance Framework (UN NQAF)

UN NQAF arranges its quality principles and associated requirements into <u>four levels</u>, 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

UN NQAF Principles, Requirements and Elements to be assured

❖ Each level contains a concise set of <u>quality principles</u> and <u>requirements</u> to guarantee quality in that aspect of quality assurance.

Principle 1: Coordinating the national statistical system

Requirement 1.1: A statistical law establishes the responsibilities of the members of the national statistical system, including its coordination. Its members are identified in a legal or formal provision.

❖ Annex A provides <u>elements to be assured</u> for each requirement.

UN NQAF Principles, Requirements and Elements to be assured

❑ A **principle** is a general proposition, or procedure, to which statistical agencies and organizations are committed and that will guide them in meeting their quality related objectives.

❑ A **requirement** is something needed in order to ensure the implementation of the United Nations National Quality Assurance Framework (UN NQAF) in Chapter 3.

❑ An **element to be assured** (provided in the Annex A) is a specific aspect of the UN NQAF that identifies possible activities, methods and tools to meet the requirement.

In this sense an element to be assured reflects a good practice that is observed to work well in one or several national statistical offices (NSOs) or other producers of official statistics, and thus is a candidate to be promoted for use in other statistical agencies. They should be followed or assured as long as they are applicable.

UN NQAF Principles, Requirements and Elements to be assured

Chapter 3: UN NQAF Principles and Requirements

Principle 1: Coordinating the national statistical system

Coordination of the work of the members of the national statistical system is essential for improving and maintaining the quality of official statistics. Principle 1 is mainly supported by FPOS 8.

Requirement 1.1: A statistical law establishes the responsibilities of the members of the national statistical system including its coordination. Its members are identified in a legal or formal provision.

Requirement 1.2: There are a body and mechanisms for [...] statistical system for activities at the [...] international level.

Requirement 1.3: There is a mechanism for considering [...] national statistical system, and if appropr[...] official.

Requirement 1.4: There is a national plan or program for th[...] official statistics.

Annex A: Detailed checklist of elements to be assured (more detailed list of good practices, activities, methods and

Detailed checklist for Principle 1: Coordinating the national statistical system

Requirement 1.1: A statistical law establishes the responsibilities of the members of the national statistical system including its coordination. Its members are identified in a legal or formal provision.

- The coordination role of the national statistical office or other body is defined in a statistical law.
- The criteria for official statistics and membership in the NSS are specified in a statistical law.
- Members of the national statistical system are identified in additional regulations or provisions.
- Responsibilities for NSS members comprise quality assurance and the specification of their contribution to official statistics.

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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

Chapter 5. 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 6. Implementation of quality assurance within the national statistical system

❖ 6.A Organization and institutional arrangements of National Statistical Systems (NSSs)

❑ Need for coordination of the NSS

❑ Responsibilities of the central coordination body

❑ Centralized and decentralized NSS

❖ 6.B The role of National Statistical System-wide bodies in the implementation of NQAF

❖ 6.C Implementation of system-wide measures – introducing all NSS members to quality assurance

❑ Different circumstances of members of the NSS.

❑ Introducing quality assurance to all members of the NSS.

Chapter 7. Quality assurance for statistics compiled from different data sources

❖ This chapter highlight 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 <u>according to their purpose and by the entity responsible for their compilation</u>.

    ❑ <u>Statistical data sources</u>

    ❑ <u>Administrative data sources</u>

    ❑ <u>Other data sources</u> (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 elemente 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 <u>target audience</u> of this chapter are statisticians in countries and regional and international organizations that are interested in the relationship between national and global statistics.

❖ <u>Provides references</u> 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.

Thank You

Visit as at https://unstats.un.org/unsd/methodology/dataquality