



**United  
Nations**

DESA  
Statistics Division

# Session 1.1: Introduction to the UN NQAF Manual and its recommendations, Results of the global survey on implementation

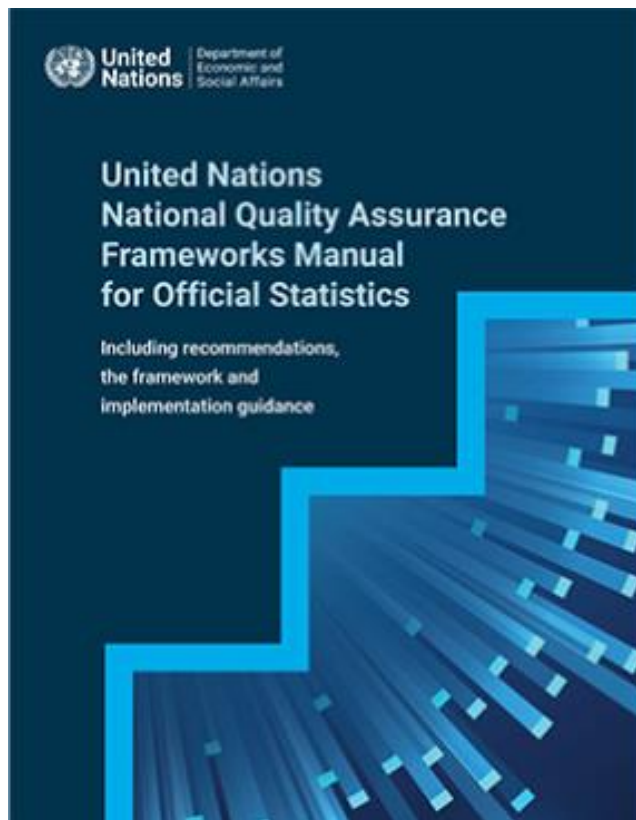
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Workshop on the Implementation of a National Quality Assurance Framework for Official  
Statistics in Countries of the Latin American and Caribbean Region

Bogota, Colombia, 22-24 November 2023



# The Manual



**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.**

**Building on and replacing the generic template and guidelines adopted in 2012, the Manual contains **recommendations on quality assurance** for official statistics, the **United Nations National Quality Assurance Framework** and **practical guidance for developing and implementing** a national quality assurance framework.**

**The Manual is intended for use by anyone interested in or working on quality assurance of official statistics.**

# 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.

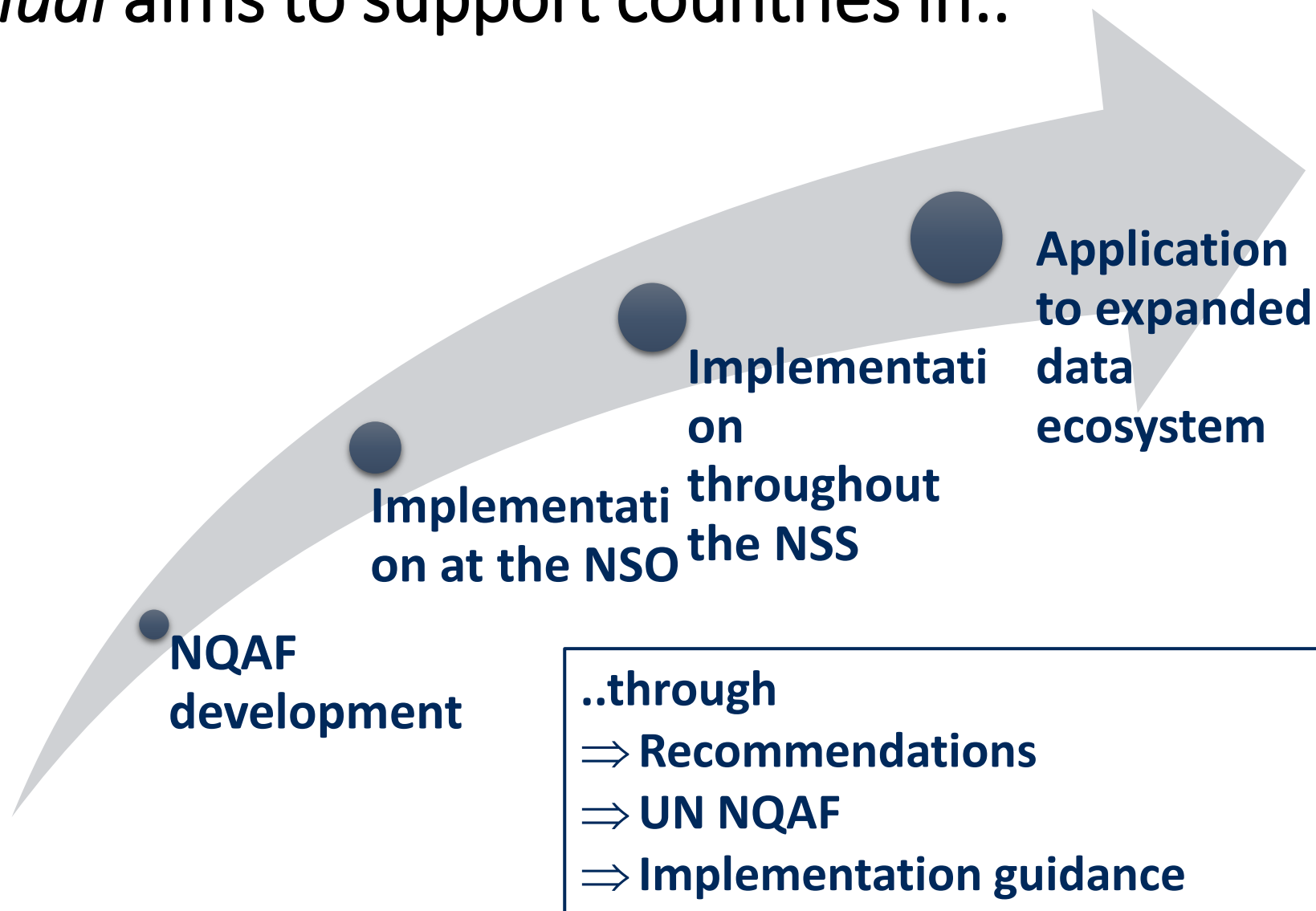
# Objectives

## **Note:**

The Manual does not aim to replace any of the existing statistical quality assurance frameworks and guidelines for official statistics.

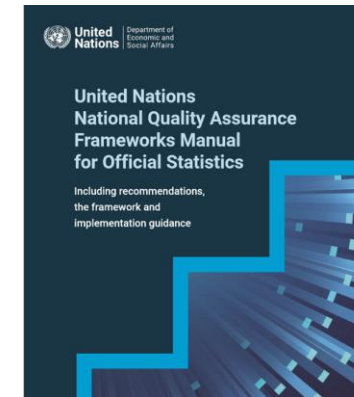
Countries and individual producers of official statistics that are already fully engaged in quality assurance and are following one of the existing quality frameworks may view this Manual only as an additional reference point that supports what they are already doing, and a source of information on the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

# The *Manual* aims to support countries in..



# The Manual overview

Part	Chapter	Title
Introduction	Chapter 1	Contents and use of this Manual
Recommendations	Chapter 2	Recommendations on quality assurance 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 assurance for statistics compiled from different data sources
	Chapter 8	Quality assurance 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



See

<https://unstats.un.org/unsd/methodology/dataquality/>

# 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

# 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

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

## 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**

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

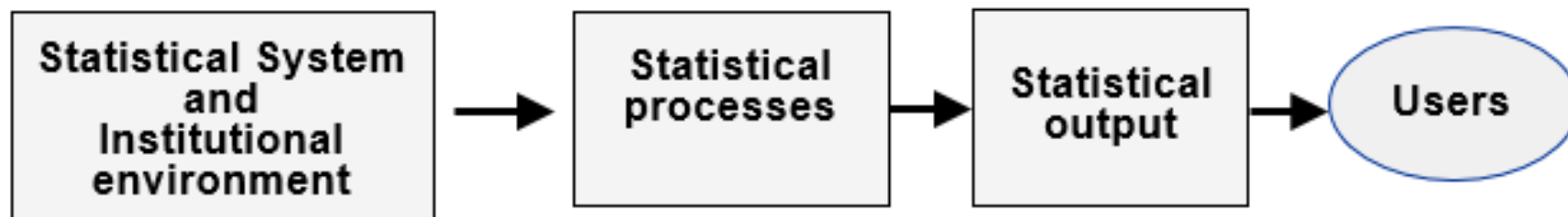
UN NQAF arranges its quality principles and associated requirements into four levels, ranging from the over-arching institutional and cross-institutional level through the statistical production processes to the outputs:

Level A: Managing the statistical system

Level B: Managing the institutional environment

Level C: Managing statistical processes

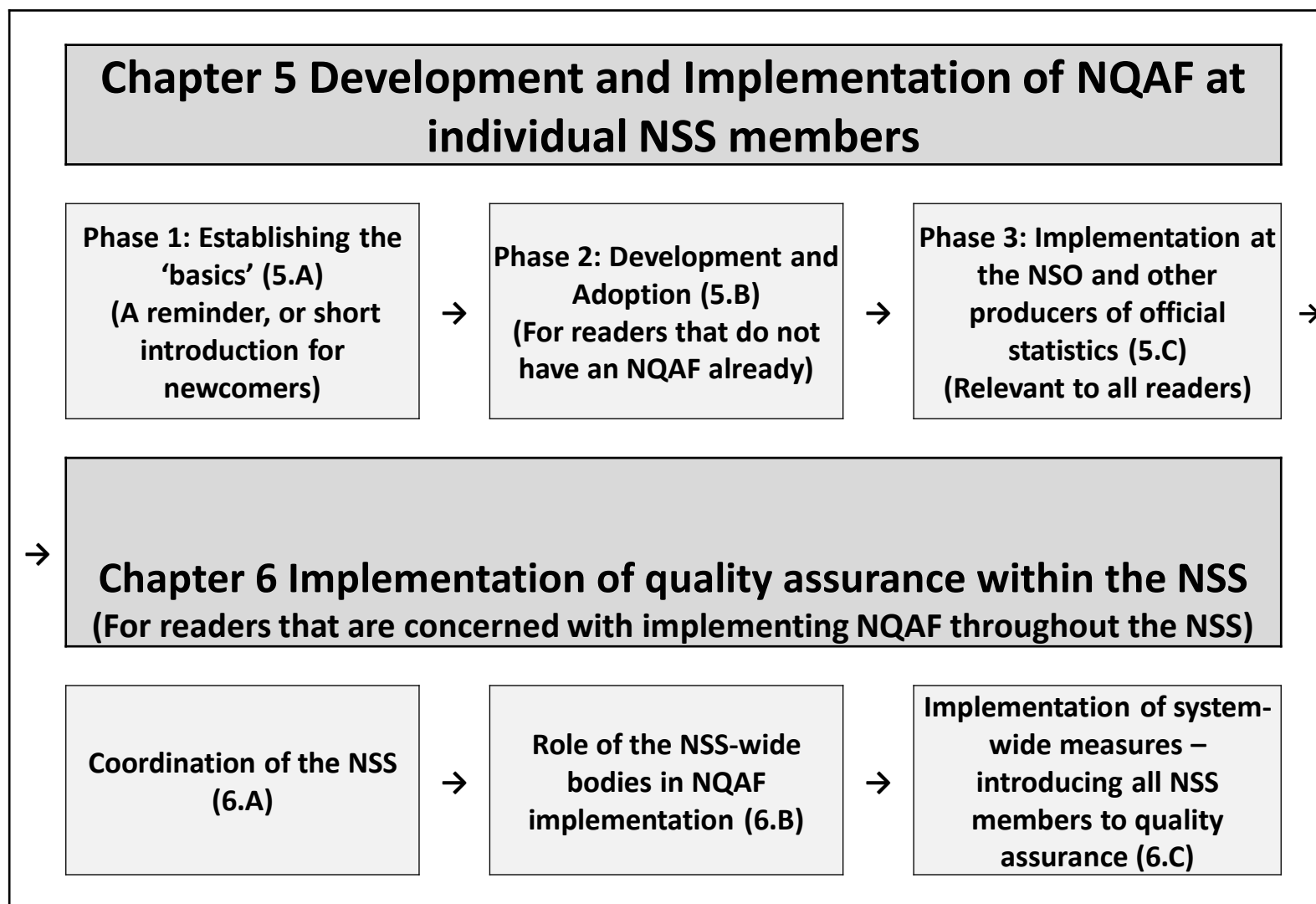
Level D: Managing statistical outputs



# 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 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 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.

# NQAF Questionnaire

The results have been provided to the 54<sup>th</sup> session of the Statistical Commission as a background document:

<https://unstats.un.org/unsd/methodology/dataquality/references/BG-3m-NQAF-questionnaire-results.pdf>

# NQAF Questionnaire - background

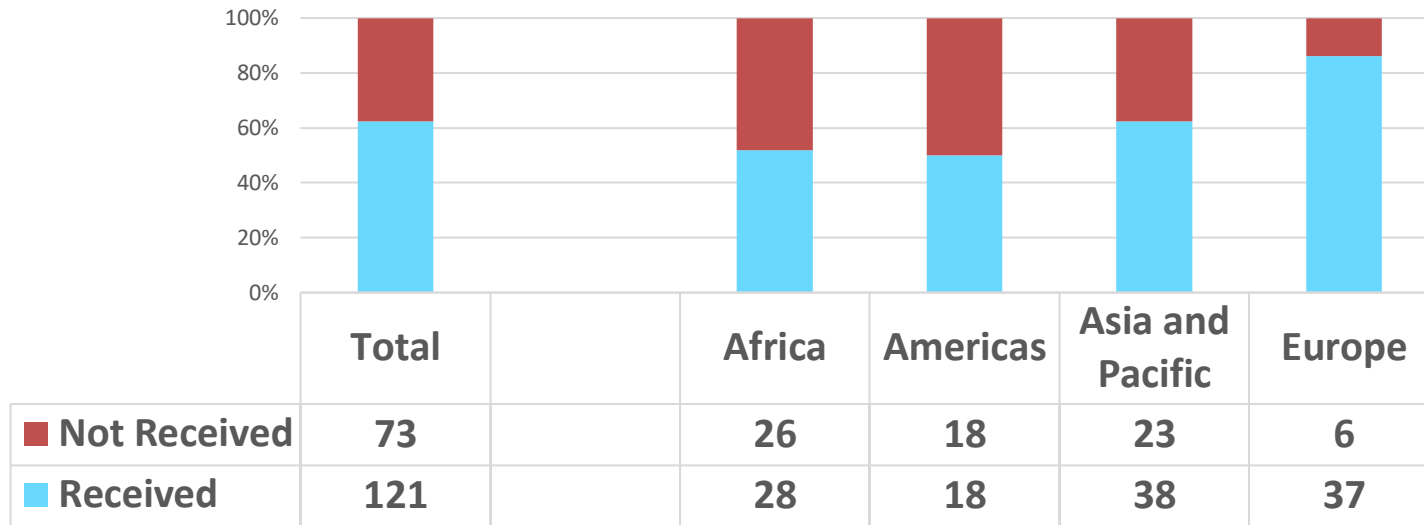
**The Statistical Commission at its 52nd session in March 2021 tasked the Expert Group to conduct a follow-up survey to assess progress in the implementation of national quality assurance frameworks by national statistical systems.**

**→ An official invitation to fill-in the NQAF questionnaire was sent out to all 194 Member States in August 2022 and the survey was closed by the end of December 2022.**

# General responses information

based on 121 responses to the NQAF implementation survey received

## Country Responses received per region

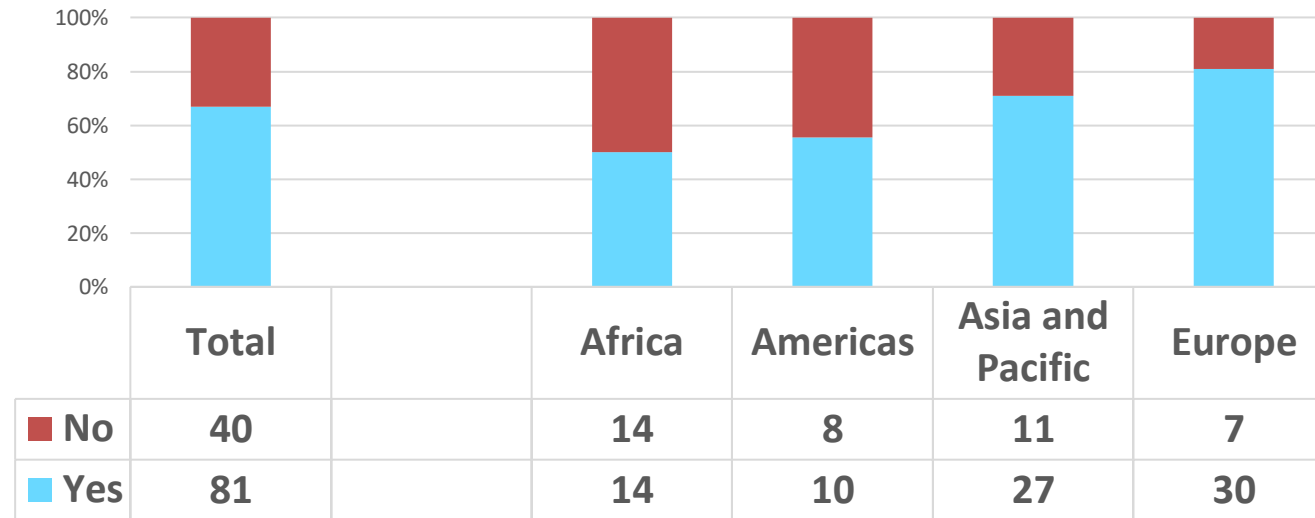


The overall response rate was about 62% with the highest response rate in the European region (about 86%). The response rate in the **Latin America and the Caribbean region is about 33%. Ten of Eighteen participating countries in this workshop responded!**

# NQAF implementation rate and coverage

based on 121 responses to the NQAF implementation survey received

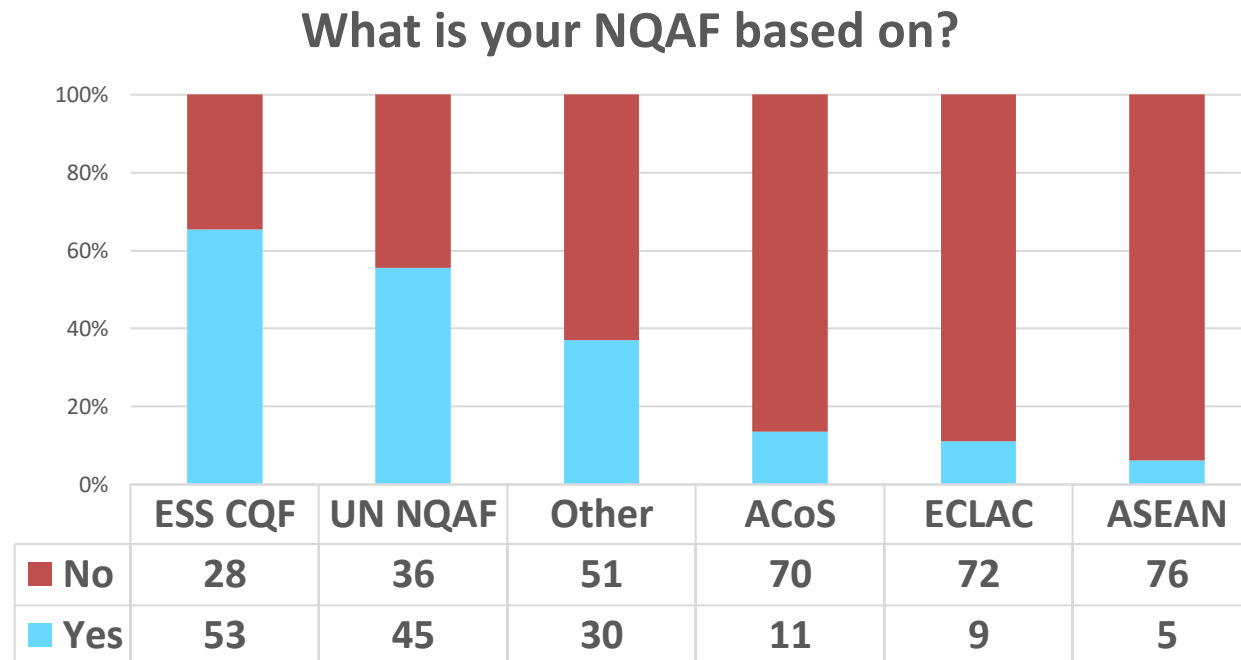
Do you have NQAF for official statistics in your country?



Of responses who indicated they have NQAF in their countries, **about 73% cover entire NSS.**

# Framework(s) that NQAF was based upon

based on 121 responses to the NQAF implementation survey received

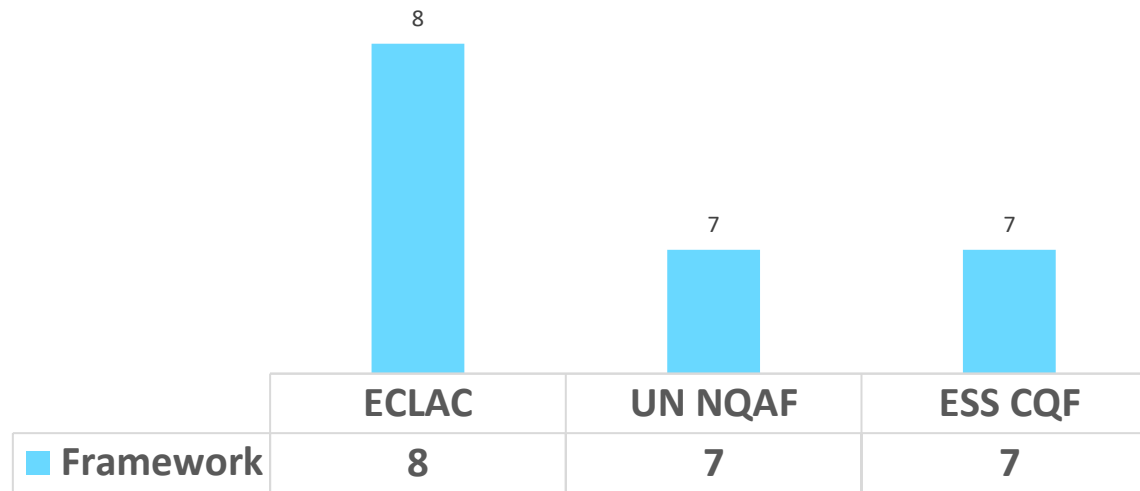


Of responses who indicated they have NQAF in their countries, globally, the most widely used framework used as a basis for NQAF is the **European Code of Practice (ECoP)**, followed by **UN NQAF (about 65% and 56% respectively)**.

# Framework(s) that NQAF was based upon (continued)

based on 121 responses to the NQAF implementation survey received

## Top 3 Frameworks in Americas

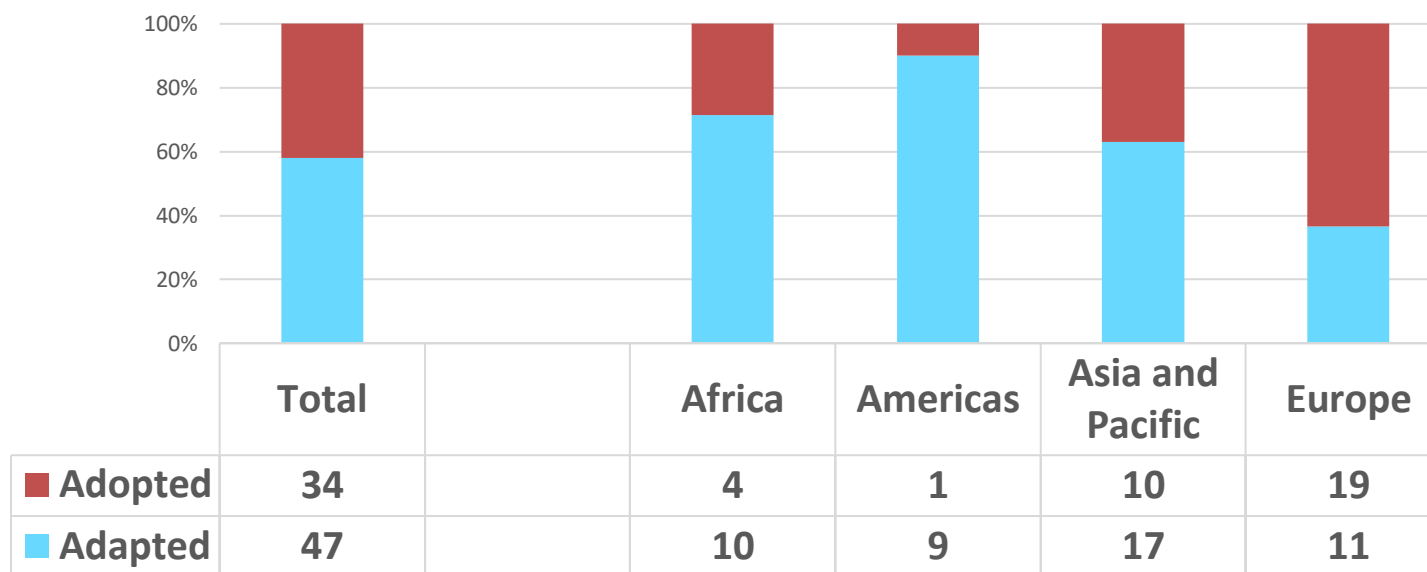


Of responses who indicated they have NQAF in their countries, in Americas, the most widely used framework used as a basis for NQAF is the **Code of good practice in statistics for Latin America and the Caribbean, UN NQAF and Common quality framework of the European Statistics System, including the European Statistics Code of Practice.**

# NQAF adoption and adaption

based on 121 responses to the NQAF implementation survey received

Is your NQAF adopted as it is or adapted to national conditions?



Of responses who indicated they have NQAF in their countries, the reference model used when creating NQAF is usually being adapted with modification to reflect their country situation. **Seven out of Eighteen participating countries also adapted NQAF with modification.**



# Additional information on NQAF implementation

## → Quality Principles

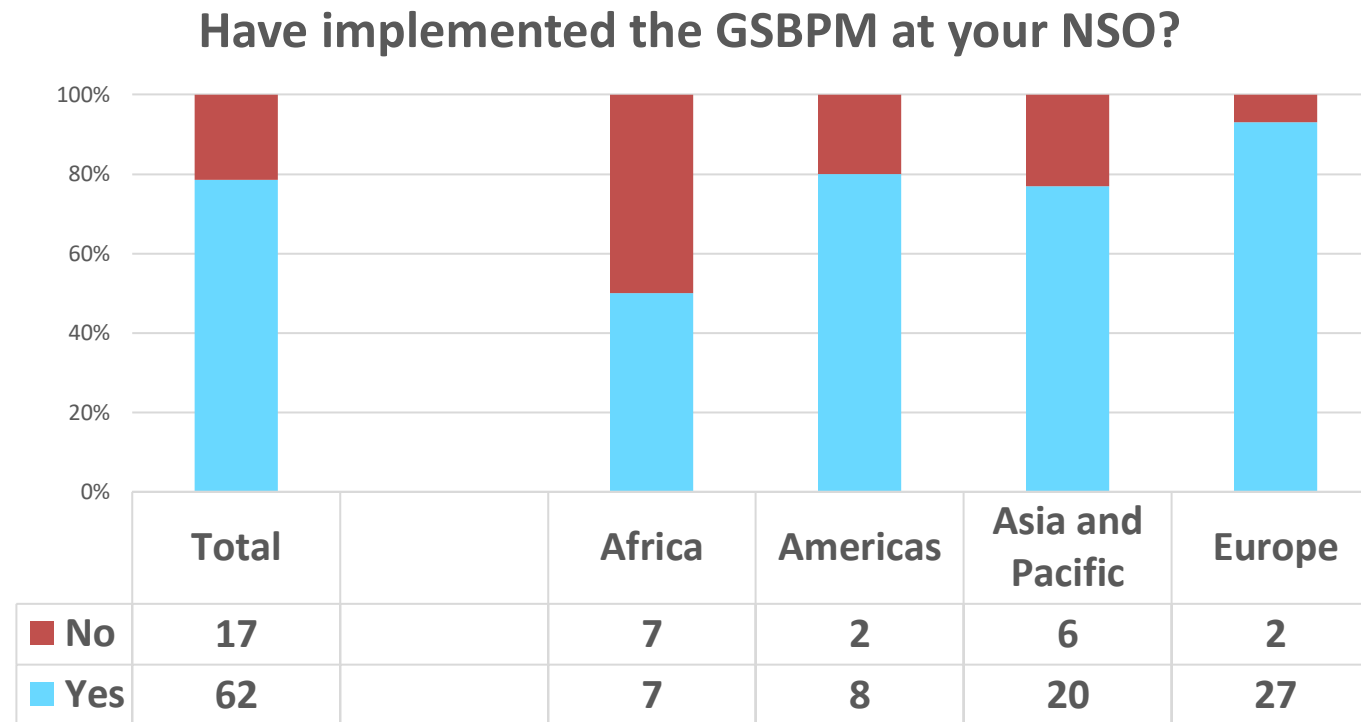
- Of responses who indicated they have NQAF in their countries, quality principles were included in national statistical legislation in about 90% of cases globally. **Seven out of nine responses collected from Latin America and the Caribbean countries answered yes for this question.**

## → Quality policy

- Of responses who indicated they have NQAF in their countries, most countries have quality policies or statement of the NSO's commitment to quality, which are publicly available. **Eight out of nine responses collected from Latin America and the Caribbean countries answered yes for this question.**

# Implementation of the GSBPM at NSO

based on 121 responses to the NQAF implementation survey received



Of responses who indicated they have NQAF in their countries, **about 79% of countries globally implemented the GSBPM at their NSOs with 78% implementation rate in Latin America and the Caribbean region.**

# Quality assurance for administrative data and other data sources

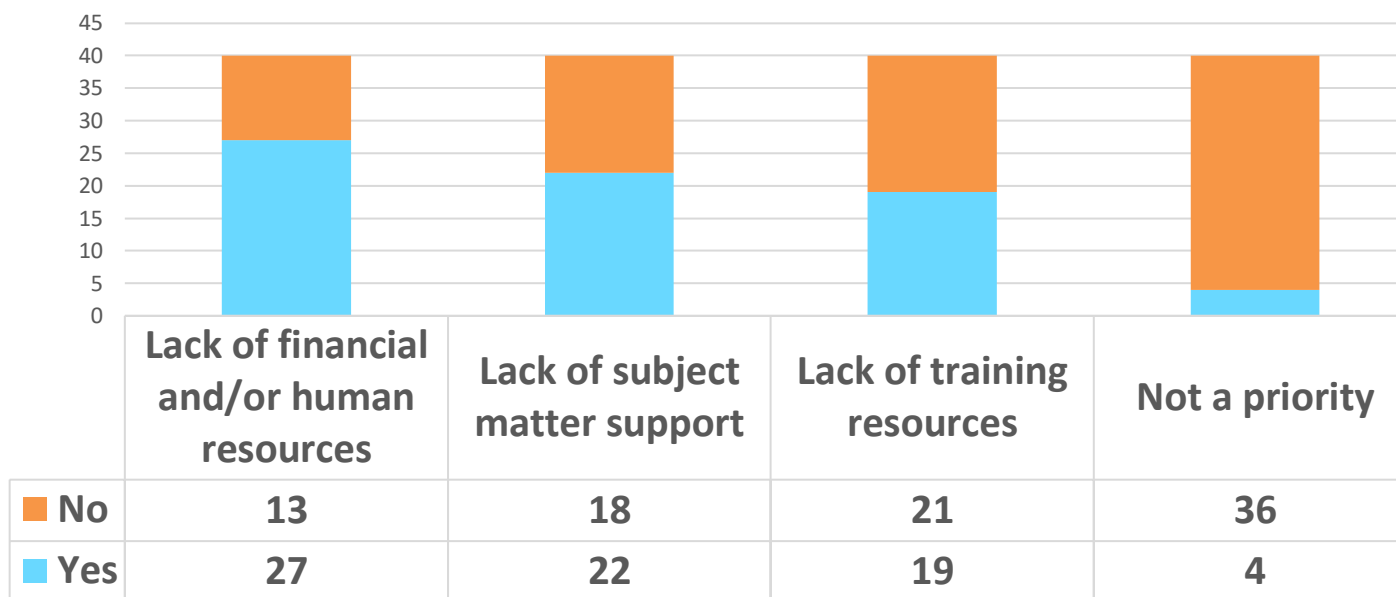
based on 121 responses to the NQAF implementation survey received

- **About 60% of countries** globally use special quality assurance frameworks, guidelines, methods or tools for the quality assessment of administrative data for the production of official statistics, **with a rate of 67% in Latin America and the Caribbean.**
- Globally, **about 40% of countries** globally use special quality assurance frameworks, guidelines, methods or tools for the quality assessment of data from other data sources used for the production of official statistics, **with a rate of 22% in Latin America and the Caribbean.**
- **In countries in Latin America and the Caribbean, special methods and tools and special guidelines** are the mostly used method for the assessment of data quality for both administrative data and other data sources.

# Reasons for not having NQAF

based on 121 responses to the NQAF implementation survey received

## Why do you not have NQAF?

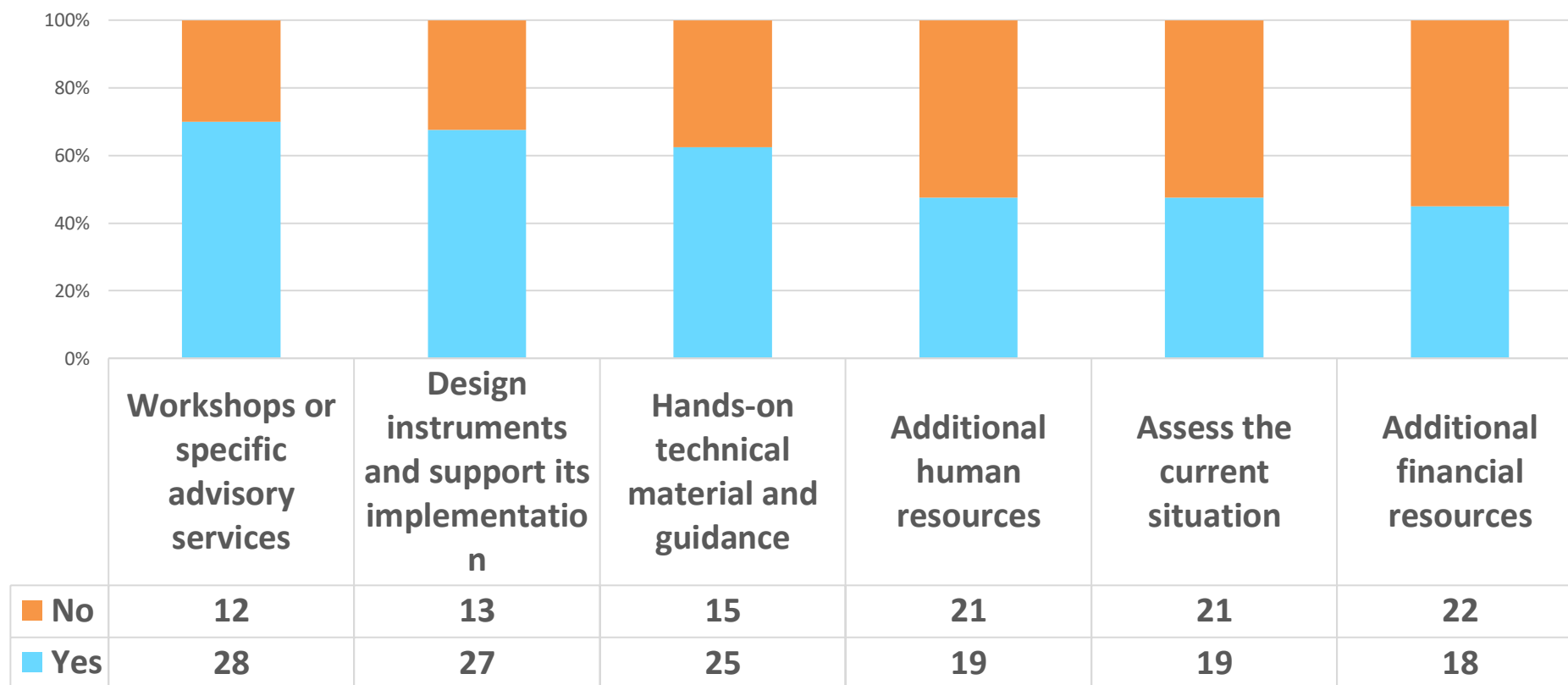


Of those responded, 73% plan to develop and implement NQAF. **Six out of eight in countries from Latin America and the Caribbean plan to develop and implement NQAF.**

# Assistance needed to develop and implement NQAF

based on 121 responses to the NQAF implementation survey received

## What assistance does your country need to develop and implement NQAF?







**Thank you.**