

Administrative data quality

Regional webinar on the use of administrative
data sources for official statistics production in
the Arab states 15 January 2025

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- What is administrative data?
- Definitions of quality
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Admin data – what we mean when we say it

Administrative data is collected by a **government department** or other public agency primarily for **administrative** (not research or statistical) **purposes**.

Administrative data is collected for the purposes of **registration, transaction and/or record-keeping**, usually during the delivery of a service.

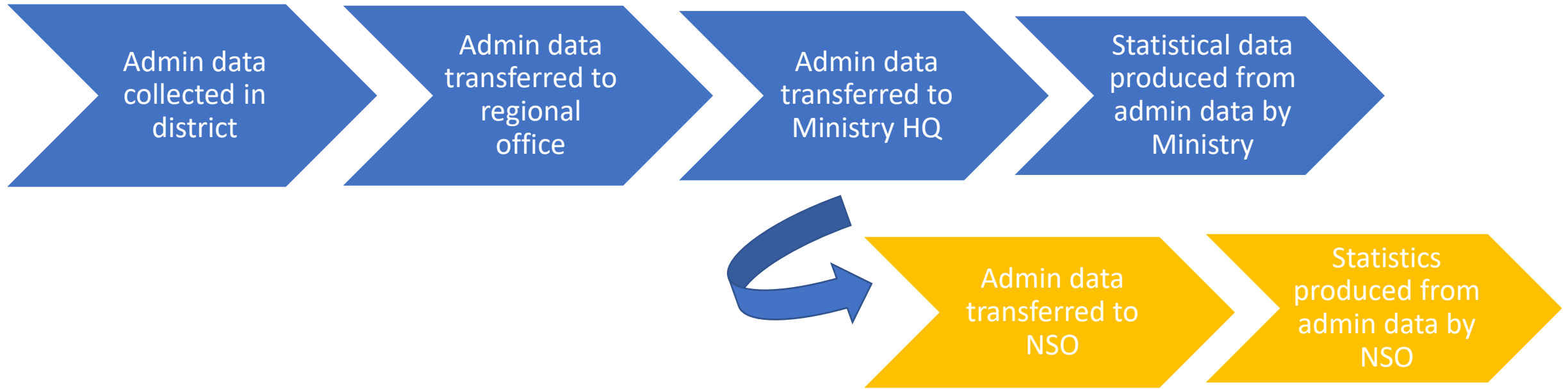


Administrative data differs from surveys...

- Administrative data is not recorded/collected with statistics in mind
 - The statistics producer is often not in control of the collection and potentially some processing of the source data
 - Classifications, concepts and definitions might vary from the ones used in statistics
 - When producing statistics from admin data you do not design the questions and sample – instead you receive a dataset and need to work from there
 - What is collected might not exactly match the variables needed for statistics production
 - Quality of data might not be strongly in focus/ no system in place to assess it

Example: General process

From administrative data to statistics



These are just two very simplified ways. All countries are organised differently, and this can look different depending on where you go.

Many ministries have the legal mandate to produce statistics (and they do it) instead of the NSO and also publish them.

Quality is
defined by
user needs
but...

The user does not decide which statistical methods are used to produce the statistics

The user does not decide if the quality of a statistical product is good.

The statistics producer is in charge of these processes and informs the user about the choices in method etc.

And how does
that affect
quality
management?

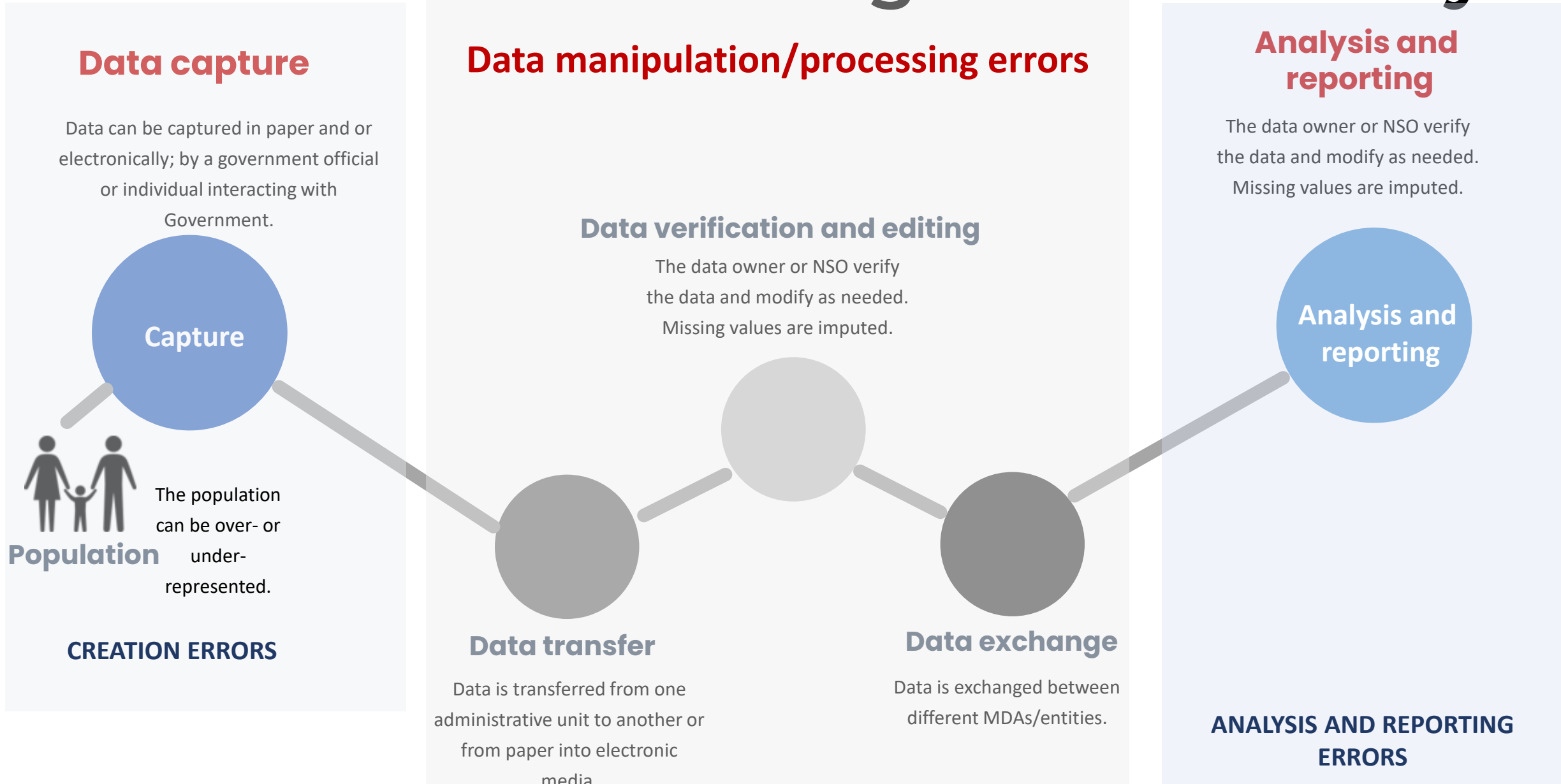
Communication between all involved
stakeholders is key

- To understand the data and data flow
- To learn about each other's needs and constraints
- To harmonise concepts and definitions
- To be aware of changes in collection and processing that can affect the data

Key values in data quality assessment and assurance efforts

- **Honesty**: Adherence to the facts, refusing to deceive others or oneself in any way.
- **Openness**: Willingness to engage with others and to hear and consider different opinions.
- **Courage**: Self-confidence and moral strength to relentlessly expose any type of organizational dysfunction, waste and to learn from failure.
- **Respect**: Recognition and appreciation of the intrinsic worth of the opinions and contributions of every team member and every stakeholder.
- **Focus**: Continuous effort to avoid low-value distractions and direct everyone's attention and energy to what matters most.
- **Trust**: Reliance on the good faith, truthfulness, knowledge and skills of each other
- **Empowerment**: Ability of self-organizing teams to ask and answer their own questions and to define for themselves how to do the work necessary to meet project goals.
- **Collaboration**: Capacity of team members to effectively cooperate and assist each other in achieving a common goal.

Sources of errors during the data lifecycle



First version of the quality assessment tool

Questionnaire for Assessing Quality of Administrative Data for Producing Official Statistics

Date of quality assessment:						
Name of publication/s, if specific for this assessment:						
Name of the administrative data source:						
Name of data holder and contact details:						
Short description of the administrative data source including its purpose:						
Degree of compliance:	<div>Yes, good compliance</div> <div>Yes, partial compliance</div> <div>No, poor or no compliance</div> <div>Not relevant</div>	Instructions: Answer each question posed under "Requirement" by choosing one of four options under "Compliance". Choose the answer which seems most relevant. Add information to substantiate the answer under "Specify strengths, weaknesses or other relevant information".				
					Assessment	
Level	Dimension	Requirement	Specification/Explanation	Compliance	Specify strengths, weaknesses or other relevant information	
1 Statistical system and Institutional environment	1.1 Legal provisions	1.1.1 Is there a legal framework/current practice, which mandates the data holder to collect the data?	Yes is good compliance, No is no compliance. In some cases there is a partly mandating legal framework or similar. In this case you need to explain and chose	Yes, good compliance		
		1.1.2 Is there a legal framework that allows the sharing of data with producers of official statistics for the production of official statistics	Yes is good compliance, No is no compliance. In some cases there is a partly mandating legal framework or similar. In this case you need to explain and chose	No, poor or no compliance		
		1.1.3 As part of this, is sharing of disaggregate data allowed?	Yes is good compliance, No is no compliance. In some cases there is a partly mandating legal framework or similar. In this case you need to explain and chose partially compliant.	Yes, partial compliance		
	1.2 Memorandum of Understanding	1.2.1 Is there an institutional agreement which formalizes the details of the cooperation and exchange of data?	Yes is good compliance, No is no compliance. In some cases there is a partial MoU that for example only formalises cooperation but no details. In this case you			
		1.2.2 Are the terms of delivery for the administrative data agreed and documented such as format of delivery, type of data, frequency etc.	Terms agreed in MoU is good compliance, terms not agreed is no compliance. If the terms are only partially agreed, explain and chose partial compliance.			
	1.3 Confidentiality and security	1.3.1 Are individual data kept anonymous? (e.g., it is not possible to identify the individual either directly or indirectly from the data, there exists a systematic anonymisation procedure)?	Yes is good compliance, no is no compliance. If the individual data are only partially kept confidential and chose partial compliance.			
		1.3.2 Do employees who work with the anonymised data	Yes is good compliance, no is no compliance. If			

Instructions

Stat.sys and Inst.envir.

Source

Processing

Statistical Output

Glossary

+

The process...

Application experiences



Country testing

Administrative data sources have been assessed together with data holders and in most cases NSO in: Bhutan, Dominican Republic, Cameroon, Namibia, Maldives. and South Africa



Trainings

Trainings specifically on the tool and quality assessment have been conducted in Kenya, Ethiopia, Mozambique and South Sudan

Self-assessment_questionnaire_on_readiness_to_use_administrative_data_for_census_purpos... .xlsx

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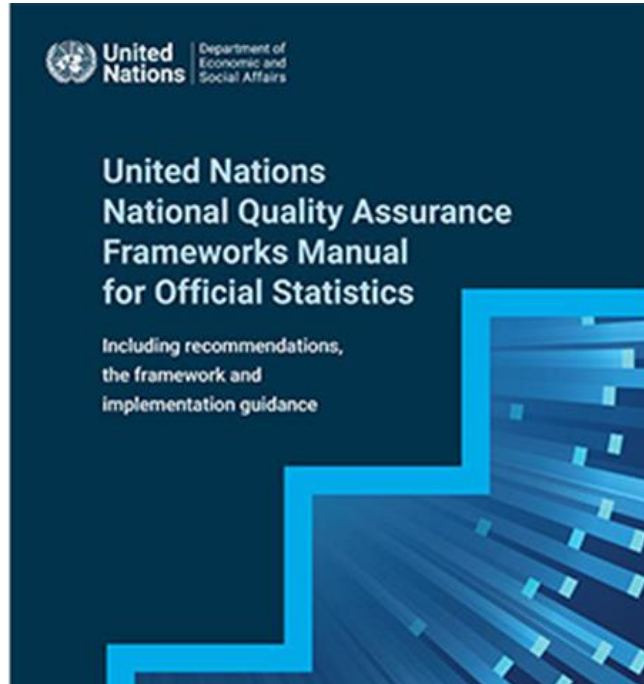
Questions for the National Statistical Office (NSO)

	A	B	C
14		Question	list: - Yes - No - Partially - Don't know
15		Political support and legal framework	
16	1	Does the NSO have a mandate to use available administrative data sources for statistical purposes, including the census?	
17	2	Does existing statistical law give the NSO the right to access individual-level administrative data sources held by other government agencies for statistical purposes?	
18	3	Is there any legal mandate (legislation/regulations) for government agencies to provide their administrative data sources to NSO?	
19	4	Has any government agency invoked their own or other legislations/regulations to deny NSO access to an individual-level administrative data source?	
20	5	Has any government agency denied NSO access to an individual-level administrative data source due to privacy concerns?	
21	6	Does the NSO have a legal mandate to protect the confidentiality of individual-level data, including the data received from other government agencies?	
		Does the NSO have a legal mandate to set national standards and classifications that are	

Other application

UN ECA and UN ESCAP have reviewed the tool and used elements for an administrative data assessment of the region and a questionnaire on censuses respectively

NQAF sub module on admin data



Methodology

Quality Assurance > Global consultation 2024

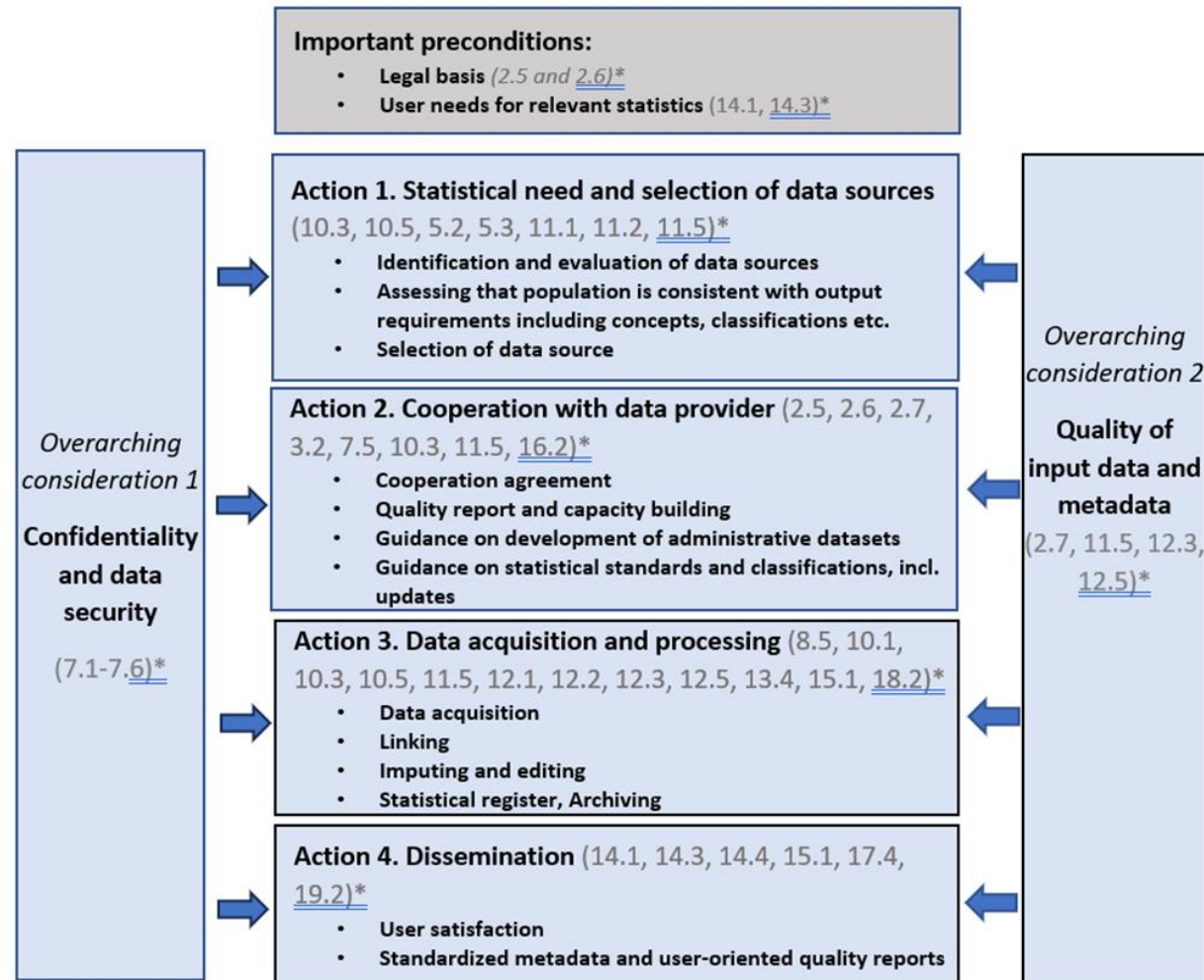
Global Consultation 2024 on draft guidance on quality assurance when using administrative and other data sources and on a maturity model for quality culture

The United Nations Statistics Division (UNSD) launches a Global Consultations on two draft guidance documents on quality assurance prepared under the auspices of the Expert Group on National Quality Assurance Frameworks (EG-NQAF):

- A draft Module for quality assurance when using administrative and other data sources to produce official statistics
- A draft Maturity Model on Quality Culture in Official Statistics

- 01 A sub-group within the UN NQAF group was established in 2023
- 02 Co-chaired by UNSD, Canada and Namibia
- 03 A module for quality assurance of administrative data developed and sent to all NSOs for consultation
- 04 Currently the group is doing last adjustment and testing the questionnaire that is an annex to the module

NQAF sub module conceptual approach



CAD REVISED TOOL

AIMED AT
COUNTRIES AT
THE BEGINNING
OF THEIR
JOURNEY

MORE DETAILS
THAN NQAF

RESOURCE THAT
CAN BE
ADJUSTED TO
COUNTRY NEEDS

POSITIVE
FEEDBACK ON
REVISED TOOL
FROM AFRICA
AND ASIA
PACIFIC

Thank you

Materials developed by UN Statistics
Division and UN Women

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