

Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Eastern-Europe / Central Asia Region Belgrade, Serbia, 10-13 December 2019

Session 5.3/ 5.1: Certification of statistical outputs and providers / the new data ecosystem

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Labelling as "official statistics"

- Labelling: the attachment of a label to statistics or to a producer of statistics (labelling) requires a procedure to guarantee that the message is appropriate and true. A label such as "official statistics" would need to be accompanied by an explanation regarding its interpretation.
- ❖ Many NSOs label certain outputs as "official statistics" following an evaluation mechanism conducted by an independent entity within the NSO or NSS. Some of these processes are described as a type of certification. However, in many countries, all statistics produced and disseminated by a member of the NSS is considered "official statistics".



Certification by an external body

- Certification is an activity that assesses whether a <u>product</u>, <u>service</u>, <u>process</u>, <u>system</u> or <u>organization</u> complies with requirements defined by an internationally recognized standard or other formal criteria.
- ❖ It is conducted by an <u>external independent certification body</u> which can be located at the national or international level. The result of a successful certification is that the certification body, such as ISO, <u>awards a certificate</u> to the organization. The ISO standards are general and can apply to any organization.
- Certification to ISO standards is an advanced method and tool of process quality management. It requires <u>documentation</u>, <u>quality reports</u>, <u>quality indicators</u>, <u>self-assessments and audits</u>. There are significant benefits, but also costs, associated with certification.



Certification by an external body

- ❖ ISO standards supplement but are not alternatives to frameworks such as the UN NQAF, which are specifically developed for statistical agencies.
- ❖ There are examples of national statistical offices that have been ISO 9001 certified: For example, the State Statistical Committee of Azerbaijan, Statistics Lithuania, Statistics Netherlands and the Statistical Office of Slovakia, Committee of Statistics Kazakhstan.



Labelling vs. certification

- Certification can be described as special type of labelling.
- The labelling of outputs as "official statistics" is sometimes described as a type of certification.
- Certification by ISO 9001 assesses the quality management system of an <u>organization</u> based on a strict process – labelling is used for statistical <u>outputs</u> and may or may not follow a strict mechanism.



Certification by the NSO?

- There is a discussion whether NSOs may be called upon to assess and certify the
 - quality of statistical agencies and
 - quality of statistical outputs of other members of the NSS or even of statistics produced outside the NSS.
- The NSO may develop special procedures for the assessment / certification of statistical agencies or outputs.
- ❖ The UK Office of Statistics Regulations and Statistics South Africa have established strict schemes for assessing compliance with their quality standard that amount to certification
 - → These schemes require independence and significant resources!!



Part 2:

The new data ecosystem



1. Emergence of the new data ecosystem

- ❖ In recent years, new data sources, data providers and statistics producers have emerged, fueled by <u>technological advances</u> and <u>new demands for detailed and timely data</u> for policymaking in the context of the 2030 Agenda for Sustainable Development, forming a new data ecosystem.
- New technologies allow an unprecedented level of recording, integration and analysis of data about human behaviors (datafication). There is now a fully established and rapidly growing marketplace for individual data.



2. Definition

- ❖ Data ecosystem: A system in which a <u>number of actors interact</u> with each other <u>to exchange</u>, <u>produce and utilize data</u>. In a simple definition, a system can be understood as a set of connected parts forming a complex whole.
- There are multiple other definitions of data ecosystem:
 - The United Nations Development Programme model consists of data producers, data objects, infomediaries (i.e., media and other commercial information services) and data users.
 - Other models put the national statistical office-led national statistical system at the centre of a system that consists of government agencies, academia and research institutions, the private sector, civil society and international and regional organizations.



3. Challenges and opportunities

→Official statistics role as predominant provider of information for policy making is challenged as it is compared with real-time data from new sources

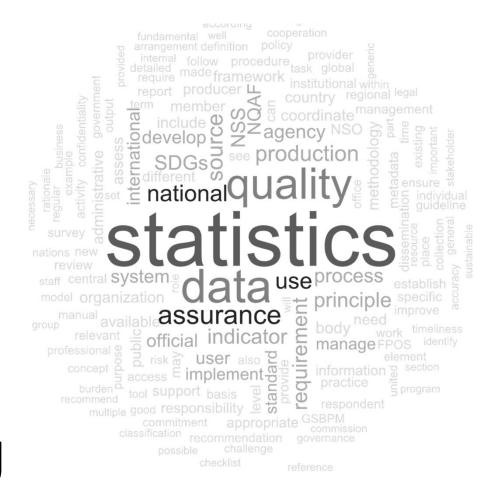
←"Big data" as opportunity for official statistics to satisfy demands for highly disaggregated and timely data

→ Authority of government (and statistical offices) on data is challenged by the private sector

←Statistical offices may become "curator" of official statistics, or take on the function of "government data steward"



- 4. What is a "curator" of official statistics and a "government data steward"
- □ A "curator" is a keeper, overseer or manager, such as for a gallery or other cultural institution. A curator of official statistics could be understood as an overseer of official statistics that makes official statistics available and ensures a certain level of quality.
- A government data steward could be understood as tasked (i) with setting standards and guidelines for the collection, management and use of government data and (ii) with ensuring that government agencies adopt common capabilities (in dealing with their data), hereby fostering the establishment of an comprehensive and integrated government data system.



THANK YOU