Statistics Division DESA/STAT/011(1)

Workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of Eastern-Europe/Central-Asia Region

Belgrade, Serbia, 10-13 December 2019

Report (final)

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I. Organization, purpose and participants

- 1. At its fiftieth session in March 2019 the Statistical Commission adopted the United Nations National Quality Assurance Frameworks Manual for Official Statistics (UN NQAF Manual) and the recommendations contained therein (decision 50/106). The Statistical Commission welcomed the Manual as an important contribution in guiding countries in the implementation of a national quality assurance framework, including for new data sources, new data providers, and for data and statistics of the Sustainable Development Goal indicators. The Manual provides guidance for developing and implementing a national quality assurance framework (NQAF) and aims at addressing quality assurance in different circumstances and situations, hereby supporting countries in safeguarding the role of official statistics as trusted source of information in a changing environment. In its decision, the Statistical Commission took note of the results of a country survey on the implementation of national quality assurance frameworks and the fact that many countries have yet to implement a national quality assurance framework.
- 2. Within this overall context, the United Nations Statistics Division (UNSD) in cooperation with the United Nations Economic Commission for Europe (UNECE), the Statistical Office of the Republic of Serbia (SORS) and the Statistical Office of the European Union (Eurostat) organized this workshop on the Implementation of a National Quality Assurance Framework for Official Statistics in countries of the Eastern (and Southern) Europe/Central-Asia Region, which was held in Belgrade, Republic of Serbia, 10-13 December 2019. The Workshop aimed at training participants from national statistical offices (NSOs) on quality assurance and the development of a national quality assurance framework and its implementation throughout the national statistical system (NSS).
- 3. A total of 22 participants from the following 16 countries took part in the workshop: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Montenegro, Norway, Republic of North Macedonia, Republic of Serbia, Russian Federation, Turkey, Ukraine and Uzbekistan. In addition, one participant of the United Nations Economic Commission for Europe and one participant of Eurostat attended the workshop.

II. Summary

- 4. Opening remarks were delivered by Dr Miladin Kovačević, Director of the Statistical Office of the Republic of Serbia and Matthias Reister, Chief of the Development Data Section, United Nations Statistics Division on behalf of UNSD.
- 5. The workshop introduced the contents of the Manual on National Quality Assurance Frameworks for Official Statistics and shared national practices. Specifically, the workshop reviewed the regional and global perspectives regarding the status of work on quality assurance and discussed the status of implementation of quality assurance in participating countries (session 1). The workshop introduced the contents of the UN NQAF Manual and its core recommendations as well as the Quality Assurance Framework of the European Statistical System (ESS QAF) and discussed the UN NQAF quality principles based on the UN NQAF selfassessment checklist (session 2). Subsequently, the meeting discussed the development and implementation of an NQAF at the NSO and its implementation across different statistical domains, focusing on the use of GSBPM (session 3). The implementation of a national quality assurance framework throughout the NSS was discussed in session 4. Furthermore, the meeting discussed quality assurance when using different and new data sources, discussed the new data ecosystem and the certification of statistical outputs and producers of official statistics (session 5). In its last session (session 6) the meeting discussed plans and next steps of countries, issues to be addressed and regional and international activities.
- 7. The workshop concluded with closing remarks by UNSD, Steve Vale of UNECE and Claudia Junker of Eurostat and Nataša Cvetković of SORS, thanking participants for their contributions and active participation, and vowing to continue the efforts to improve the quality of official statistics.

III. Conclusions

Session 1: Overview of the implementation of national quality assurance frameworks in participating countries

1. The workshop:

- a. noted that all participating countries have specific departments/divisions working on quality assurance; in many countries committees/councils/working groups support coordination within the national statistical system (NSS) but their efforts are not always comprehensive and fully inclusive;
- b. noted that advanced practices and tools of quality assessment and assurance are used by many countries, such as the use of the Generic Statistical Business Process Model (GSBPM), self-assessment and auditing, Single Integrated Metadata Structure (SIMS 2.0), ISO certification and risk management;

c. noted that the coordination of the NSS, quality assurance at other national authorities producing official statistics (ONAs), quality assurance of administrative data sources, lack of financial, human and IT resources and changes in international and regional standards represent challenges in many countries.

Session 2: Review of principles and their requirements (indicators)

2. The workshop:

- a. identified the following general quality challenges under UN NQAF, Level A: Managing the statistical system: mechanism for considering statistics produced outside the NSS (Requirement 1.3), data access to private sources (Req. 2.6); providing guidance to data providers (Req. 2.7); sufficient support for the implementation of standards (Req. 3.2); and dealing with divergences from established standards (Req. 3.3);
- b. noted under UN NQAF, Level B: Managing the institutional environment that Principle 4 (Independence), Principle 5 (Impartiality and objectivity), Principle 6 (Transparency) and Principle 8 (quality commitment) are typically not well applied outside the NSO;
- c. noted, when discussing UN NQAF, Level C: Managing statistical processes, that several requirements such as having a dedicated unit, staffing, the use of administrative data under Principle 10 (Methodological soundness) as well as several of the requirements under Principle 11 (Cost-effectiveness) were found especially challenging;
- d. Noted that the analysis of the replies to the self-assessment checklist confirmed the special challenges in Principle 1 (Coordination of the NSS) in conjunction with Principles 2 and 3, in Principle 11 (Cost-effectiveness) and in Principle 9 (Adequacy of resources), as those were frequently indicated as not being fully applied;
- e. noted that the self-assessment checklist can be a very useful training tool but that conducting a thorough self-assessment requires a dedicated effort, including the collection of substantial information and collaborating of staff across the NSO.

Session 3: Implementation of quality assurance at the national statistical office

3. The workshop:

a. took note that discussions and presentations under this item highlighted the following good practices: use of Total Quality Management (TQM) to focus on user needs and processes, the use of a quality database to generate metadata and quality reports, the use of a quality management strategy, the use of GSBPM and the Generic Activity Model for Statistical Organizations (GAMSO), the use of

- risk management, and the use of multiple and advanced tools and actions for quality assurance and assessment; furthermore, the usefulness of peer reviews / global assessments for quality assurance was pointed out;
- b. noted the commitment of countries to use GSBPM for the analysis of the statistical production processes; noted that a strong commitment is required to overcome the initial hesitation of staff in the different areas when implementing GSBPM throughout the NSO; noted that areas of particular importance and impact, or areas with problems would be selected first for analysis; however, the selection may at times also depend on the current workload; noted that the GSBPM model has been shown to work for all areas of statistics.

Session 4: Implementation of quality assurance throughout the national statistical system

4. The workshop:

- Regarding implementation throughout the NSS, took note of the importance of adequate commitment and resources to engage long term with the members of the NSS and the importance of demonstrating tangible results and of providing basic and ready-to-use quality assurance guidelines and tools;
- b. noted that the lack of mandate or capacity limits constrain the NSO's ability to coordinate quality assurance across the NSS;
- c. noted the positive effect of technical assistance activities and peer reviews/global assessments in strengthening coordination across NSS;
- d. noted that good practices to support implementation across the NSS include (i) creating awareness regarding obligations of all members of the NSS to ensure the quality of the official statistics they are producing, (ii) training on quality assurance, (iii) the introduction/provision of quality assurance tools such as metadata management and quality reports, and (iv) generally, actively engaging with other members of the NSS such as through regular meetings.

Session 5: Dealing with new data sources and data providers

5. The workshop:

- a. noted the following good practices: (i) implementation of a systematic approach to use administrative data by engaging with all providers of administrative data,
 (ii) creation and build-up of internal capacity for the use of new data sources,
 (iii) special practices of improving the quality of statistical registers, (iv) use of institutional quality reports covering all data sources, and (v) detailed preparation for the use of administrative data in the national population census;
- b. took note that countries generally have plans and frequently, specific strategies to increase the use of administrative and new data sources;

- c. noted, however, that there are generally no specific strategies for assuring the quality of data from these new and administrative data sources beyond the quality assurance efforts currently undertaken for existing data sources;
- d. noted as major challenges in the use of other data sources: access to data, expertise how to use and analyse the data, IT resources, absence of use of statistical concepts and definitions in these data sources, and under coverage, among other issues;

On certification and the new data ecosystem

- e. noted that labelling statistics as "official statistics" is a common practice but that certification requires an elaborate process (see certification by ISO standards) that must be conducted by an independent/outside entity; noted that certification by ISO standards provides a strong label that is internationally recognized and therefore attractive;
- f. noted that the practice of internal independent quality reviews following a strict procedure and criteria as introduced by one country corresponds to the practice of certification:
- g. noted that the ISO 9001 certification is conducted on the level of the organisation and does not guarantee the quality of the outputs; however, ISO 9001 certification has been found very useful by several NSOs to document, review and improve quality assurance processes;
- h. noted the arrival of a new data ecosystem and considered possible new roles of the NSO such taking on the role as "curator" of official statistics (overseeing official statistics rather than producing it)¹ or "government data steward" (coordinating all government data)², or certifying statistical outputs or producers of official statistics:
- i. noted that all countries have a "digital strategy", often part of their national strategy for the development of statistics or a government strategy, which lays out the future of the NSO/country on how to utilize the opportunities of the new data ecosystem and how to respond to its challenges;
- j. noted that for the NSO to certify statistical outputs (or other producers of official statistics) would require in many cases a change in legislation, that the NSO may not be the right entity for this responsibility, and that there are currently no discussions and no plans to introduce certification; certification may also not be

¹ As per dictionary, 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.

² 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 (see ECE/CES/2019/28).

- well liked by other producers of official statistics; however, some countries agreed with the importance of doing it; other countries are dedicated to the certification by ISO which maybe could be applied in a wider context beyond the NSO;
- k. noted the suggestion to develop a global label for official statistics which, however, would require a specific and recognized mechanism to ensure that the "quality message" of that label be credible and recognised; the peer reviews and global assessments conducted by Eurostat and UNECE represent such mechanism; however, these reviews are focused on assessing compliance with the European statistics Code of Practice/the UN Fundamental principles of official statistics or the UN National Quality Assurance Framework and on identifying improvement actions and are currently not sufficiently used to convey a message about the quality of the NSS and the quality of statistical products to data users;
- noted that participants had significant reservations about the NSO moving to a
 role of curator of official statistics; it would require an appropriate mandate,
 authority and capacity, and assuring the quality of statistics produced by others
 could be difficult and risky; it was noted that the global discussion on the NSO
 becoming a curator of statistics is very much linked to the task of compiling the
 national SDG indicators which in most countries are produced to a large degree
 by other entities than the NSO;
- m. noted that taking on the role of government data steward would require a change in legislation and that another government entity may be better placed to take on such role.

Session 6: Roadmap of countries and support

6. The workshop:

- a. noted that the Expert Group on National Quality Assurance Frameworks is pursuing a work program which includes promoting the Manual and the self-assessment checklist, the provision of a roadmap for NQAF implementation, addressing issues such as certification, e-learning, and an improved data quality website and the establishment of an ongoing engagement/follow-up mechanism with countries to support the implementation of a NQAF;
- b. noted that UNECE will continue working on the following: the issue quality in the new data ecosystem with a special focus on data integration and geospatial data, selected subject matter guidelines such as the quality of administrative data in censuses, the global assessment and sector reviews (including IT) and use of GSBPM and GAMSO;
- c. noted that Eurostat will focus on implementing the next round of peer reviews in the ESS, modalities of access to other data sources and assessing their quality and expects to soon issue the new handbook on quality and metadata reports;

- d. noted the following plans and next steps of countries for advancing quality assurance, which were also mentioned throughout the workshop:
 - preparation or implementation of new statistical laws;
 - execution of existing implementation plans and roadmaps, including implementation of recommendations from previous self-assessments, peer reviews and global assessments;
 - conduct of new self-assessments and new peer reviews/global assessments;
 - improving quality assurance throughout the NSS and for administrative data sources;
 - wider/further implementation of GSBPM and GAMSO;
 - wider/further implementation of SIMS and quality and metadata reports, as well as quality reviews.
