



# Economic and Social Council

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## Statistical Commission

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Item 3 (e) of the provisional agenda\*

### Items for discussion and decision: quality assurance in the global statistical system

## Quality assurance in the global statistical system

### Report of the Secretary-General

#### *Summary*

In the present report, which was prepared in accordance with Economic and Social Council decision 2016/220 and past practices, the adequacy of the generic quality assurance framework as a tool for quality assurance for the entire national statistical system in each country is considered in the light of the implementation of the indicator framework for the Sustainable Development Goals and the emergence of new data providers and data sources. The relationship between national and international quality assurance frameworks is examined, as is the relationship of quality assurance frameworks with the Fundamental Principles of Official Statistics and related guidance on best practices. The report also contains the proposed work programme for the Expert Group on National Quality Assurance Frameworks for the next two years. The Commission is invited to comment on the report and endorse the proposed work programme of the Expert Group.

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\* E/CN.3/2017/1.



## I. Introduction

1. The Expert Group on National Quality Assurance Frameworks<sup>1</sup> was constituted in August 2010. Representatives of the following 17 countries were invited to serve as members of the Expert Group: Canada, Chile, China, Colombia, Egypt, France, Indonesia, Italy, Jamaica, Japan, Mexico, the Niger, Norway, Qatar, South Africa, Switzerland and Ukraine. Eurostat, the International Monetary Fund, the World Bank, the Economic Commission for Africa, the Economic Commission for Europe, the Economic Commission for Latin America and the Caribbean, the Economic and Social Commission for Asia and the Pacific and the Economic and Social Commission for Western Asia were invited to serve as observers. South Africa agreed to serve as the Chair of the Expert Group, with the Statistics Division of the Department of Economic and Social Affairs acting as the secretariat.

2. In its decision 43/110 (see [E/2012/24](#)), the Statistical Commission endorsed the generic national quality assurance framework template prepared by the Expert Group on National Quality Assurance Frameworks and encouraged countries to use it. The Commission asked the Expert Group, international, regional and subregional entities and the Statistics Division to assist countries in the implementation of their national quality assurance frameworks and to report back to the Commission in due course on the lessons learned during a piloting process. The Commission emphasized that regular review and continuous improvements of the framework were essential and stressed the importance of having a knowledge base on quality assurance, including good practices, glossaries, examples and metadata, upon which countries could draw for guidance. The Committee for the Coordination of Statistical Activities was asked to address the topic of quality assurance, in particular harmonization among different international quality assessment frameworks.

## II. Need for further work by the Expert Group

### Review of the National Quality Assurance Framework template and guidelines

3. It is five years since the adoption by the Commission of the generic National Quality Assurance Framework template and guidelines. The Commission may therefore wish to reactivate the Expert Group to assess implementation of the Framework in countries and report back to the Statistical Commission regarding the lessons learned to date. This will also provide the opportunity to review the available guidelines and supporting materials for its implementation and to examine how its implementation in countries could be further supported in the light of the requirements of the 2030 Agenda for Sustainable Development. With regard to the 2030 Agenda for Sustainable Development, Member States agreed in paragraph 74 (g) of General Assembly resolution [70/1](#) that follow-up and review would require high-quality, accessible, timely, reliable and disaggregated data.

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<sup>1</sup> See <http://unstats.un.org/unsd/dnss/QualityNQAF/nqaf.aspx>.

4. Given the scope of the 2030 Agenda and the Sustainable Development Goal indicator framework, large parts of countries' national statistical systems will be involved in the monitoring of the Goals. The monitoring of the Goals is also expected to involve new data providers and require the use of new data sources such as big data and geospatial information. In many countries, the national statistical agencies will consequently be increasingly required to assure data quality across the entire national statistical system and to provide adequate guidance and tools for all data providers. Furthermore, awareness about statistical data quality principles must be promoted beyond the existing national statistical system to expected and potential new data providers and to data users in order to increase their ability to properly assess the quality of data from different sources. The Expert Group should therefore review the National Quality Assurance Framework template and guidelines and consider amending their contents, presentation and tools, gearing them directly towards assuring quality throughout the entire national statistical system and the application of the Framework to new data sources.

5. The proposed review should also take into account any relevant recommendations currently being prepared by the United Nations Global Working Group on Big Data for Official Statistics, and any other related efforts that have been undertaken since the National Quality Assurance Framework template and guidelines were adopted.

### **Quality assurance in the global statistical system**

6. The purpose of the international statistical system is to support and facilitate the availability of internationally comparable national data in the various statistical domains, to calculate global and regional aggregates, and to make such data available in line with the Fundamental Principles of Official Statistics (General Assembly resolution 68/261). Accordingly, on the basis of the agreement on standards for data compilation, national statistical systems submit data to the entities designated for global data collection in specific statistical domains. Regional and subregional entities are frequently involved in the international data compilation. There are also agreements for data sharing among regional and international agencies, to avoid duplication of data collection. The international and regional organizations that receive national data are tasked with ensuring the quality and comparability of the national data, and usually provide technical assistance to countries for data compilation in their areas, in accordance with international standards. International and regional agencies may adjust national data to make them internationally comparable or estimate missing data to fill data gaps and allow for the calculation of regional or global aggregates. In those cases, quality standards should be followed and countries should be fully involved in the estimation process and informed about the adjustments and calculation methods (see Economic and Social Council resolution 2006/6).

7. Chief statisticians of the United Nations system have developed and agreed on a generic quality assurance framework that addresses the above aspects of the statistical work of regional and international agencies and is aimed at ensuring that appropriate quality assurance procedures are being followed (see paras. 12-15 below). The United Nations Statistics Quality Assurance Framework will be available to the Commission in a background document. In 2013, the Committee for

the Coordination of Statistical Activities published recommendations on the use of non-official sources in international statistics to ensure quality and transparency on the data being used by regional and international agencies. Among other things, the recommendations call for a prior and continuous consultation process with the relevant national (statistical) authorities and transparent documentation when non-official sources are used.<sup>2</sup>

8. Quality assurance for Sustainable Development Goal indicators is carried out at the national, regional and global levels. Quality assurance procedures at the various levels are interlinked, as regional and international agencies rely on the compilation of high-quality data at the national level, while countries rely on regional and international organizations to produce internationally comparable data for all countries, available at the regional and global levels. The Fundamental Principles of Official Statistics and the principles governing international statistical activities,<sup>3</sup> adopted and implemented by countries and organizations according to their specific circumstances, embody the commitment of countries and regional and international organizations to data quality. Quality assurance in the global statistical system can hence be understood as a system of obligations whereby countries and regional and international organizations provide high-quality data to users.

9. In practical terms, information about quality assurance should be included in the metadata at all levels of reporting. The experience of the Millennium Development Goals has clearly revealed the need to fully document data quality at all levels, including in countries and regional and international agencies. The issue of metadata and data quality is also linked to the implementation of standards for data and metadata and their exchange. The Statistical Data and Metadata Exchange initiative provides such a standard.

10. In conclusion, the Expert Group may also wish to address the issue of quality assurance in the global statistical system and examine whether further guidance in the context of global reporting of data and, in particular, for the Sustainable Development Goal indicators is required. It may put forward recommendations for the compilation of Sustainable Development Goal indicators at the regional and global levels, based on the Fundamental Principles of Official Statistics and the principles governing international statistical activities, and the adoption of quality assurance frameworks at the national, regional and global levels.

### **III. Work programme of the Expert Group on National Quality Assurance Frameworks**

11. It is suggested that the Expert Group on National Quality Assurance Frameworks carry out the following activities over the next two years:

(a) Assess the implementation of the generic National Quality Assurance Framework template and guidelines in countries;

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<sup>2</sup> See <http://unstats.un.org/unsd/acsub-public/practices.pdf> and <http://unstats.un.org/unsd/acsub/2016docs-28th/E-publication.pdf>.

<sup>3</sup> See [http://unstats.un.org/unsd/acsub-public/principles\\_stat\\_activities.htm](http://unstats.un.org/unsd/acsub-public/principles_stat_activities.htm) and [E/CN.3/2006/13](#).

(b) Review the available guidelines and supporting materials for the implementation of the National Quality Assurance Framework template and guidelines and examine how the implementation of the Framework in countries can be further supported in the light of the data requirements of the 2030 Agenda for Sustainable Development;

(c) Update the National Quality Assurance Framework template and guidelines and amend the overall information package as necessary;

(d) Review the issue of quality assurance within the global statistical system, and consider what further guidance could be provided in support of the global reporting of data for the Sustainable Development Goal indicators.

#### **IV. Points for discussion**

**12. The Commission is requested:**

**(a) To comment on the report and the proposed work programme of the Expert Group on National Quality Assurance Frameworks;**

**(b) To endorse the proposed work programme of the Expert Group on National Quality Assurance Frameworks for the next two years and approve its updated terms of reference (see annex).**

## Annex

### **Updated terms of reference of the Expert Group on National Quality Assurance Frameworks**

1. The Expert Group on National Quality Assurance Frameworks will:

(a) Assess the implementation of the generic National Quality Assurance Framework template and guidelines in countries;

(b) Review the available guidelines and supporting materials for the implementation of the Framework template and guidelines and examine how the implementation of the Framework in countries can be further supported in the light of the data requirements of the 2030 Agenda for Sustainable Development;

(c) Update the National Quality Assurance Frameworks template and guidelines and amend the overall information package as required;

(d) Review the issue of quality assurance within the global statistical system, and consider what further guidance could be provided in support of the global reporting of data for the Sustainable Development Goal indicators.

2. The Expert Group will consist of current members and observers that confirm their interest in actively participating in its work and a limited number of additional countries and organizations that wish to join, ensuring balanced regional representation. The Expert Group will consult and work closely with the Committee for the Coordination of Statistical Activities and the Committee of the Chief Statisticians of the United Nations System on the issue of quality assurance within the global statistical system, as required. Member States will elect two co-chairs. The Statistics Division of the Department of Economic and Social Affairs will be acting as the secretariat of the Expert Group.

3. The Expert Group will conduct its work electronically but will meet face to face if the opportunity or need arises. Participation in the Expert Group is self-funded. The Expert Group will report back to the Statistical Commission in 2019.

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