

Evaluation of the 2008 CCSA International Organizations Quality Conference

Note prepared by Eurostat

Objective

The objective of this paper is to present next steps of the quality assurance frameworks project, as well as an evaluation of the 2008 CCSA quality conference and proposals for the way forward.

Background

The conference on Data Quality for International Organizations has been held since 2004 on a biennial basis under the auspices of the Committee for the Coordination of Statistical Activities (CCSA). The 2008 Rome conference was, therefore, the third of such conferences dedicated entirely to quality, following the 2004 conference in Wiesbaden, Germany and the 2006 conference in Newport, Wales, UK.

The purpose of these conferences is to provide statistical experts from international or supra-national organisations with a forum to discuss specific data quality issues related to their work and to exchange experiences regarding the various quality mechanisms developed for improving the collection and dissemination of international data.

CCSA project on the use and convergence of international quality assurance framework

In 2005, the CCSA endorsed a set of principles governing international statistical activities, which can be seen as the general super-structure supporting improvement of quality for global (interdependent) statistical systems and thus enhancing the credibility of the statistics but it needs to be put into concrete at the level of the individual international organisations and their specific statistical processes and the corresponding statistical outputs.

In order to promote the use and convergence of quality frameworks (QF) for international organisations, the CCSA supported in 2005 a Eurostat coordinated project on the use and convergence of an international quality assurance framework with the aim of bringing different quality initiatives under a common framework in order to ensure that the right quality assurance procedures (methods and tools) are put in place and that the current and future quality activities of international organisations are well integrated.

The project started by an in depth analysis of the existing situation in the different International Organizations (IOs):

- Only a few IOs have an encompassing QF;
- Existing QFs are quite similar;
- Verification of the importance of individual statistical processes led to the development of a Quality Assurance Framework (QAF);
- Need for a website centralizing the links to other quality assessment pages;
- Importance of identifying and implementing best practices.

In the 2006 CCSA meeting a project action plan was presented for phase II of the project. This led to the production in 2007 of the guidelines for the Implementation of Quality Assurance Frameworks for International Organizations Compiling Statistics and the development of a process oriented self assessment checklist for assessing the statistical data quality in IOs.

The guidelines for the implementation of quality assurance frameworks at international organizations related to

- the objectives and main pillars of a quality assurance framework
- the main output quality components building upon a set of common definitions and dimensions
- integrated quality metadata making use of existing standards for their exchange (SDMX) and dissemination (SDDS)
- the application of process-oriented quality assessment methods and tools
- implementation steps and principles.

CCSA Quality Conference 2008 (Minutes in Annex 1 of this document)

Structure and terms of reference

It was agreed at the 2008 February CCSA meeting that the theme for the next Quality Conference would be centred on how these guidelines or specific elements thereof are being applied in IOs, covering topics such as: review of currently existing quality assurance frameworks; role of the principles governing international statistical activities; examples of experiences in piloting quality assessment checklists; tools and practices for collecting quality metadata from data providers and informing users on the quality of statistics; user and partner surveys; peer reviews; coherence of data published by IOs- potential of SDMX; training in quality management; and support to countries (especially developing countries) in exchanging experiences regarding quality management tools.

There were 39 participants from 14 Organizations and one NSI, FAO and Eurostat, the latter respectively with 13 and 7 participants accounted for more than half of the participants. The conference sessions were structured to cover the following five main themes: (i) Quality assessment and the use of checklists and user surveys; collection of quality metadata; dissemination of quality information; training in quality management; (ii) International cooperation on quality management – principles, harmonization of frameworks, peer reviews, support of countries; (iii) Dissemination platforms to make data more accessible and interpretable; (iv) Best practices in imputation and estimation; (v) Roundtable: "The implications for data quality of making data internationally comparable - or respecting national, but not comparable sources". A total of 14 presentations were made. The meeting covered a broad set of

topics, e.g. data quality, metadata, SDMX, data dissemination, methodology, etc. Also case studies of sector work were shown, e.g. on labour statistics, population statistics, etc.

Evaluation

In general, the usefulness of conferences such as this one was emphasized, especially for the exchange of experience and for the development of common and harmonized tools for assuring and assessing quality in statistics.

During the conference it was verified that the implementation of the quality assurance framework, according to the CCSA approved guidelines is beginning to be implemented in some of the IOs.

Next steps quality assurance framework:

- Eurostat will provide by September 2008 the revised version of the Guidelines and the self assessment checklist taking into account the comments received by other IOs;
- Monitoring of the evolution of the implementation of the quality frameworks:
 - Eurostat will make an update of the 2006 inventory by sending a short questionnaire to the IOs in the first half of 2009;
 - The questionnaire will focus on one or two particular statistical domains and possible peer review by IOs;
 - Results of inventory analysed: mid 2009;
 - Identification of best practices in these one or two domains;
 - The activity of sharing and implementing best practices for international organisations is launched.

Next steps CCSA Quality Conference 2010:

- Based on the results of the monitoring exercise, the draft programme of the next Quality conference will be established and presented to the CCSA September 2009 Meeting;
- Invitation for papers by end 2009;
- Papers available by May 2010;
- Programme will include presentation of the monitoring results and will focus on the promotion of the best practices in the identified statistical domains.

The next CCSA conference should aim to enhance working towards the development and sharing of best practices at international level in order to establish a system of coordinated methods and tools that guarantee adherence to minimum requirements concerning statistical processes and products.

The value of developing common standards and sharing of good practices with other international and national statistical organisations can hardly be overestimated, a more general “strategy” encompassing both ICT infrastructure and quality issues is necessary to orient international organisation activities and to benefit from the opportunities created by new institutional set-ups and technological changes, bearing in mind the final target of improving the quality of international statistics.

Annex 1: Minutes of the Committee for the Coordination of Statistical Activities Conference on Data Quality for International Organizations Rome, Italy 7 - 8 July 2008 (Prepared by UNSD)

I. Introduction

The Conference on Data Quality for International Organizations, organized by Eurostat and UNSD on behalf of the Committee for the Coordination of Statistical Activities (CCSA) and hosted by the Food and Agriculture Organization of the United Nations, took place from 7 to 8 July 2008 at FAO Headquarters in Rome, Italy.

The conference was attended by 40 participants from 15 international or supra-national organizations. In the concluding Roundtable discussion, the participants were joined by Mr. Peter Hackl, Director General of Statistik Austria.

This conference was the third meeting of the CCSA entirely dedicated to data quality. It preceded the European Conference on Quality in Official Statistics – Q2008, which was held from 9 to 11 July 2008, also in Rome.

The conference was opened by Mr. Pieter Everaers from Eurostat, who welcomed the participants and then introduced Mr. Hafez Ghanem, Assistant Director-General of the Economic and Social Department of the Food and Agriculture Organization of the United Nations, who gave the welcome address. Mr. Ghanem stressed the usefulness of conferences such as this one in maintaining the focus of quality in statistics, and shared two important lessons the FAO team learned recently from the FAOSTAT2 project: (i) the importance of keeping users both informed about proposed changes to methodology and outputs and involved in the decision-making process in order to ensure that the changes actually represent quality improvements to the main stakeholders, and (ii) the need for capacity building at the country level to help countries improve the quality of their statistics.

Mr. Everaers then reviewed the terms of reference of the conference and noted how the current conference sessions, as presented in the programme, would cover the various themes.

The conference sessions were structured to cover the following five main themes: (i) Quality assessment and the use of checklists and user surveys; collection of quality metadata; dissemination of quality information; training in quality management; (ii) International cooperation on quality management – principles, harmonization of frameworks, peer reviews, support of countries; (iii) Dissemination platforms to make data more accessible and interpretable; (iv) Best practices in imputation and estimation; (v) Roundtable: "The implications for data quality of making data internationally comparable - or respecting national, but not comparable sources". A total of 14 presentations were made.

The main issues and conclusions of the conference are described in the next section, after which the programme and the list of participants are included. More detailed information on the conference, as well as the papers presented during it, can be found on the conference website: <http://unstats.un.org/unsd/accsub/CDQIO-2008.htm>.

II. Main points and conclusions

1. Quality assessment and the use of checklists and user surveys; collection of quality metadata; dissemination of quality information; training in quality management

It is evident that the “quality language” has very much evolved since the first two CCSA conferences on data quality for international organizations, and that there is convergence in quality dimensions, concepts, methods and tools among the different international organizations. While the established tools and methods for quality assessment are useful and are working well, nevertheless these instruments are continually being enhanced and adjusted to make them more effective as more experience is gained with their use. Issues discussed in this context were (i) the need for quality commitment at the senior level; (ii) the need to link quality assessments with the regular programme monitoring and management exercises; (iii) the increasing need to focus on quality communication; and (iv) the usefulness of establishing a standard template for member countries to apply when compiling a metadata database, so that such a comparable database can be an effective tool for statistical quality assessment and improvement. With respect to user surveys, it was observed that all agencies experience low response rates and that it would be useful to share experiences regarding “user segmentation” and “successful user outreach tools”. One important conclusion is that quality assessment tools, such as detailed questionnaires, will need to be adapted to the circumstances (e.g. developing/developed statistical systems) and that some coaching with respect to their implementation will be necessary.

2. International cooperation on quality management – principles, harmonization of frameworks, peer reviews, support of countries

The principles governing international statistical activities represent the shared consensus regarding the codification of quality frameworks for official statistics compiled and disseminated by the international agencies. As a consequence of this shared fundamental vision and the continuous process of sharing experiences, the quality frameworks employed by the various international organizations are becoming more harmonized with one another. At the same time, it was emphasized that due to institutional differences, some differences remain well justified. It was observed that the peer reviews conducted so far have had positive results, and have been instrumental in identifying common difficulties, in sharing best practices and in transferring knowledge. They also introduce an essential element of objectivity into the quality assessment process. Whilst so far limited to developed statistical systems, the potential of peer reviews for developing countries was emphasized, also as an advocacy tool to raise the awareness of the importance of investing in good official statistics. Peer reviews also need to be applied among international organizations.

3. Dissemination platforms to make data more accessible and interpretable

Recognizing that users are changing and their expectations are increasing, that communication strategies are continuously evolving and new approaches such as web 2.0 are becoming more popular, it is evident that international organizations must adjust their thinking as well. Making relevant data easily accessible and interpretable, with good visualization tools, is crucial. Also, data accessibility can no longer be considered as a passive concept, but a more interactive approach with users is needed. This is all the more true in a context where there is increasing competition from outside the “official statistics providers”. Whilst many international agencies are currently experimenting with new dissemination and communication tools, there is considerable scope for cooperation and sharing of ideas to identify effective practices.

4. Best practices in imputation and estimation and making data internationally comparable

There was consensus that imputations must be made by international organizations in order to satisfy an increasing demand for comparable global data and that it is not possible to wait for countries to improve their systems so that they can produce the data themselves. It was recognized as well that if international organizations didn't make the imputations, someone else would. It was observed that the ECOSOC resolution on strengthening national statistical capacity set the framework for imputations by stipulating (i) transparency of methods, (ii) use of country data and (iii) country consultation. Guidelines from the CCSA group on existing tools and best practices in imputation were considered to be useful, and it was recognized that good practices in imputation should include independent peer review of methods and assumptions. Also in this context, the question about the use of non-official data when official data are missing was raised. WTO offered to prepare a note on this topic for the regular CCSA session. In general, a continued dialogue with countries, for instance through the Statistical Commission, was considered necessary with respect to the issue of imputations. Moreover, it would be useful to develop measures of uncertainty.

5. Role of the meetings and the future

In general, the usefulness of conferences such as this one was emphasized, especially for the exchange of experience and for the development of common and harmonized tools for assuring and assessing quality in statistics. However, a more formal evaluation of the elements of the conference was considered useful so as to facilitate a review of the format of the conference for the future. It was also suggested that future conferences could broaden the focus of the quality assessments from data production to the fields of standard setting and technical cooperation. It was agreed that the CCSA would discuss and determine the scope and format of possible future conferences.

Annex 1A: Conference Agenda

Committee for the Coordination of Statistical Activities

Conference on Data Quality for International Organizations Rome, Italy, 7-8 July 2008

Programme and papers

Monday, 7 July 2008

14.00 - 14.45 **Welcome, introduction and keynote address**

- Eurostat: Pieter Everaers, Co-chair, Committee for the Coordination of Statistical Activities (CCSA)
- FAO: Hafez Ghanem, Assistant Director-General of the Economic and Social Department

14.45 - 16.15 **Session 1: Quality assessment - use of checklist; user surveys; collection of quality metadata; disseminating quality information; training in quality management**

Organizer: Eurostat

- Antonio Baigorri, Martina Hahn and Håkan Linden (Eurostat) "[Implementation of quality assurance activities in Eurostat](#)"
- Le Anh Hua (ILO) "[Assessment of statistical data quality: The example of the Wages part in the ILO Yearbook of Labour Statistics \(chapter V\)](#)"
- Som Hiek (FAO) "[Development of metadata framework for national agricultural statistics: Preliminary findings from a recent experience in Asia and Middle East, and plans for expansion to other regions](#)"
- August Gotzfried and Marco Pellegrino (Eurostat) "[The Euro-SDMX metadata structure and quality indicators: a new template for reference metadata](#)"

16.15 - 16.30 **Coffee break**

16.30 - 18.00 **Session 2: International cooperation on quality management - principles; harmonization of frameworks; peer reviews; support of countries**

Organizer: ECB

- Martina Hahn (Eurostat) "[The European statistical system peer reviews: results, experiences and lessons learnt](#)"
- Catherine Ahsbahs and Violetta Damia (ECB) "[The ECB statistical quality framework and quality assurance procedures: an assessment in the light of the attempt to harmonise frameworks of international organizations](#)"
- Lucie Laliberte (IMF) "[Data managed according to the DOAF at the IMF Statistics Department](#)"

Tuesday, 8 July 2008

9.00 - 10.30 **Session 3: Dissemination platforms to make data more accessible and interpretable**

Organizer: UNECE

- Stefan Schweinfest and Mary Jane Holupka (UNSD) "[UNdata - an innovative way to provide easy access to UN System data](#)"
- Enrico Giovannini (OECD) "[The role of communication in transforming statistics into knowledge](#)"
- Steven Vale (UNECE) "[Accessibility and clarity - the most neglected dimensions of quality?](#)"

10.30 - 11.00 **Coffee break**

11.00 - 12.30 **Session 4: Best practices in imputation and estimation**

Organizer: ILO

- Sylvester Young (ILO) "[Some quality issues in imputation](#)"
- Carla Abou-Zahr (WHO) "[WHO practices in imputation and estimation](#)"
- Steven Vale and Heinrich Brünger (UNECE) "[Imputation in UNECE statistical databases - Principles and practices](#)"
- Thomas Buettner (UNPopDiv) "[Experiences in and challenges of preparing population estimates for all countries of the world](#)"

12:30 - 14:30 **Lunch break**

14:30 - 16:00 **Session 5: Roundtable: "Making data internationally comparable or respect national, but not comparable sources - implications for data quality?"**

Organizer: OECD

Chair: Heinrich Brungger (UNECE)

Panelists: Sylvester Young (ILO), Pieter Everaers (Eurostat), Stefan Schweinfest (UNSD), Lucie Laliberte (IMF), Enrico Giovannini (OECD) and Peter Hackl (Austria)

16:00 - 16:30 **Coffee break**

16:30 - 17:00 **Summary of the conference and conclusions**

Organizer: UNSD

Annex 1B: List of participants

United Nations entities and programmes

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United Nations Statistics Division	Stefan Schweinfest Mary Jane Holupka	schweinfest@un.org holupka@un.org
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Economic and Social Commission for Asia and the Pacific	Pietro Gennari	gennari@un.org
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United Nations Environment Programme	Jaap van Woerden	woerden@grid.unep.ch

Specialized agencies and related organizations

Food and Agriculture Organization of the United Nations	Hafez Ghanem David Marshall Hiek Som Robert Mayo Naman Keita Ricardo Sibrian Xiaoning Gong Richard Grainger Gertjan De Graaf Mette Loyche-Wilkie Adam Gerrand Arvydas Lebedys Mauro Paolozzi Felice Padovani	hafez.ghanem@fao.org david.marshall@fao.org hiek.som@fao.org robert.mayo@fao.org naman.keita@fao.org Ricardo.sibrian@fao.org Xiaoning.Gong@fao.org Richard.grainger@fao.org Gertjan.DeGraaf@fao.org Mette.LoycheWilkie@fao.org Adam.Gerrand@fao.org Arvydas.Lebedys@fao.org Mauro.Paolozzi@fao.org Felice.Padovani@fao.org
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