



Centraal Bureau voor de Statistiek • Statistics Netherlands

Director-General

Paul Cheung
Director Statistics Division/DESA
Office of the Director Statistics Division (UNSD)
Department of Economics and Social Affairs
Two United Nations Plaza
DC2-1670. New York, NY 10017
USA

contactpersoon *contact* Peter Struijs, Peter van Nederpelt
doorkiesnummer *direct line* +31 (0)70 570 7441
uw brief van *your letter of* 3 September 2009
ons kenmerk *our reference* CBO-2009-122
bijlage(n) *enclosure(s)* -
onderwerp *re* Comment on the National Quality Assurance Framework

Den Haag, 8 October 2009

Dear Mr Cheung,

Thank you for giving us the opportunity to comment the National Quality Assurance Framework (NQAF). We studied the framework with great interest and support the idea of the quality framework at UN level.

We see however some problems with the draft framework if we had to apply the framework in our organization. Main problems are that the model is not easily scalable (for example to the level of TQM) and that other frameworks like European Code of Practice (CoP) and IMF's Data Quality Assessment Framework (DQAF) cannot be easily integrated into the framework.

At Statistics Netherlands (SN) a model is created for analyzing current frameworks and creating new frameworks: a syntax for frameworks. This model is generic and can be applied at all levels, all scales and all organizations. The concepts of the model are briefly explained in appendix A.

The idea behind this model is that the scope of a framework will be delineated precisely by so called quality areas and that all relevant factors (definition, risk analyses, indicators, controls, etc.) can be described in coherence within the scope of each individual quality area.

SN currently applies this model to develop a TQM framework. CoP and DQAF are integrated in this framework as well as other important sources as the ESS Stat law, the Dutch National Statistical Law, SN's long term plan, SN's annual plan, etc.

The application of this model to NQAF could be considered. If we could be of any assistance in further developing the NQAF please contact us. We are prepared to participate in the expert group if desired.

CBS Den Haag
P.O.Box 24500
2490 HA Den Haag
The Netherlands

Tel: 31 (0)70 337 38 00
Fax: 31 (0)70 387 74 29



Centraal Bureau voor de Statistiek • *Statistics Netherlands*
Director-General

Continuation sheet No 1 corresponding to letter CBO-2009-122 dated 8 October 2009

We formulated comment at a more detailed level too. This comment can be found in appendix B.

Sincerely Yours,

Gosse van der Veen



Appendix A: Concepts of the Object Oriented Quality Management model

In this appendix we explain briefly the concepts of the Object Oriented Quality Management model (OQM).

1. One of the concepts of the model is that an organization and its environment can be seen as a set of **objects**. Objects are for example user relationships, respondents, statistical output, data, metadata, processes, registers, response burden, staff, information systems, etc.
2. Every object has its own, different set of **characteristics**. The characteristics of data are different from characteristics of user relationship for example. Only characteristics that can be compared to a standard are relevant in our model. Characteristics will in our model *never* be seen apart from an object.
3. A combination of a characteristic and an object is called in our model a **quality area**. Examples of quality areas are *accuracy of data, efficiency of processes, satisfaction of users*.
4. The definition for **quality** in our model is: *A set of normative characteristics of an object*. The *definition* is more neutral compared to definitions like “fit for use” or “according to specifications”.
5. Because every quality area has the same structure (although different content) we can distinguish the same steps or questions for each quality area:
 - a. What is the **definition** of the quality area?
 - b. How **important** is the quality area for the objectives of the organization?
 - c. What are the **relationships** with other quality areas? What is the nature of the relationship (trade-off, cause-effect, means-objectives)?
 - d. How are the **responsibilities** distributed? Who is the owner of the quality area?
 - e. What are the **requirements** for each quality area (qualitative)? What are for example governance policies for this quality area?
 - f. What **indicators** are applicable in the quality area (quantitative)?
 - g. What are **causes of problems** with the quality area?
 - h. What are the **effects of problems** with the quality area to the objectives of the organization? This step together with the previous one can be called a **risk analysis**.
 - i. What **measures** or controls are necessary to control the quality area? This is the most important step of the model.

The set of measures within each quality area should cover the Deming cycle Plan Do Check Act in order to continuously improve the quality area.

The measures should be selected so 1) all requirements are met and 2) the residual risk is at an acceptable level. Then we can conclude that the quality area is in control.

The OQM model has been published on the SN website. The title of the publication is Object Oriented Quality Management ([OQM](#)). The model has recently been presented at Statistics: Investment in the Future at Prague. A [paper](#) and a [presentation](#) is available on the Internet.



Continuation sheet No 3 corresponding to letter CBO-2009-122 dated 8 October 2009

Appendix B: Detailed comment on the NQAF

On a more detailed level we would like to comment on some procedures mentioned in Figure 2: Generic National Quality Assurance Framework (NQAF).

Managing timeliness and punctuality

Although these timeliness and punctuality are closely related, different measures are needed to control timeliness and punctuality of statistical output. Our suggestion is to split these two procedures.

Managing coherence and comparability

In our view consistency of data should be added.

- Our definition of coherence is the degree to which statistical information can be combined. Coherence is a characteristic of conceptual metadata (definitions).
- Our definition of comparability is the degree to which data that has the same definition can be compared. Comparability is a characteristic of data. Types of comparability are comparability over time and between (regional and non-regional) domains.
- Our definition consistency is the degree to which data regarding the same statistical information are equal or has a certain relation. Consistency is a characteristic of data. There are different types of consistency like consistency between provisional data en final data, statistics and National Account, short term and long term statistics. But also consistency between symmetric streams, model based consistency (identities) and consistency between aggregated and micro data can be distinguished.

Although these coherence and comparability (and consistency) are closely related, completely different measures are needed to control these dimensions. Our suggestion is to split these procedures in three.

Managing statistical infrastructure

Confidentiality of data (in the process and as statistical output) could be mentioned as a separate 'procedure'. This is in our view of vital importance to the each NSO.

Managing provider relationship

Response rate maintenance is in our view a measure to control accuracy of data (variance). The level of *response burden* (measurement and reduction) can be seen as an area in itself. Apart from that we see the *willingness of respondents to cooperate* as a separate area.

Managing metadata

Does this procedure only refer to data on quality? Should process metadata and conceptual metadata (definitions) not be added to the NQAF? Relevant characteristics of metadata are completeness, accuracy, timeliness, clarity and ambiguity.

Quality Assurance Procedures

NQAF mentions the word "procedures" for managing (or control) certain areas. This seems too restrictive. Is 'measures' a good alternative?