

High-level seminar on Global assessments and peer reviews - follow-up and next steps

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LPRs/AGAs: Implementation of recommendations for the improvement of quality of statistical processes and outputs

Session 4: Implementation of improvement recommendations related to quality of statistical
processes and outputs

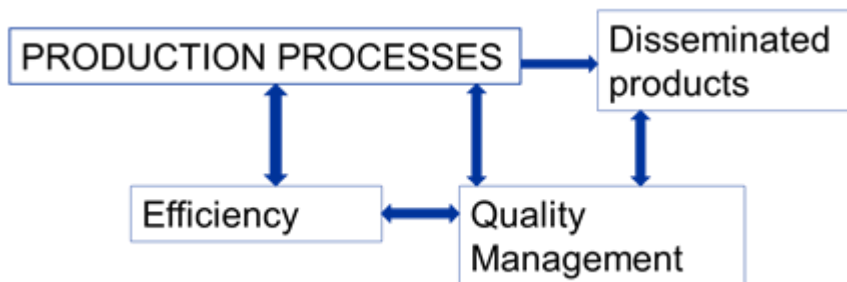
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1. Introduction:

The purpose of this introduction is to discuss issues related to implementing recommendations from Light Peer Reviews (LPRs) and Adapted Global Assessments (AGAs), and especially related to production processes, dissemination, efficiency and quality management. These issues are of very strategic and important nature for the good functioning of a modern statistical office. Thus also much of the discussions related to the LPRs and the AGAs would be focusing on these issues. Many national statistical institutes, and not only those represented at this seminar, have continuous challenges for improvement actions on the topics mentioned. Thus, exchange of experiences and good practices will be of great value. My hope is that this introduction can stimulate a fruitful discussion.

First of all, it is important to clarify the topic addressed. Actually, there is close interconnection between the different topics mentioned. There is a strong connection between management of quality and efficiency, which are both related to the statistical production processes and the products resulting from these processes:

Figure 1. The interconnection between the topics:



2. The Generic Statistical Business Process Model

Another way of depicting this relationship is the Generic Statistical Business Process Model (GSBPM). The GSBPM has been developed within the Joint UNECE/Eurostat/OECD Work Session on Statistical Metadata (UNECE 2009). It is intended as a comprehensive model suitable to document any kind of official statistics business process, from more traditional surveys to administrative data acquisition or to statistical compilation.

The GSBPM comprises four levels:

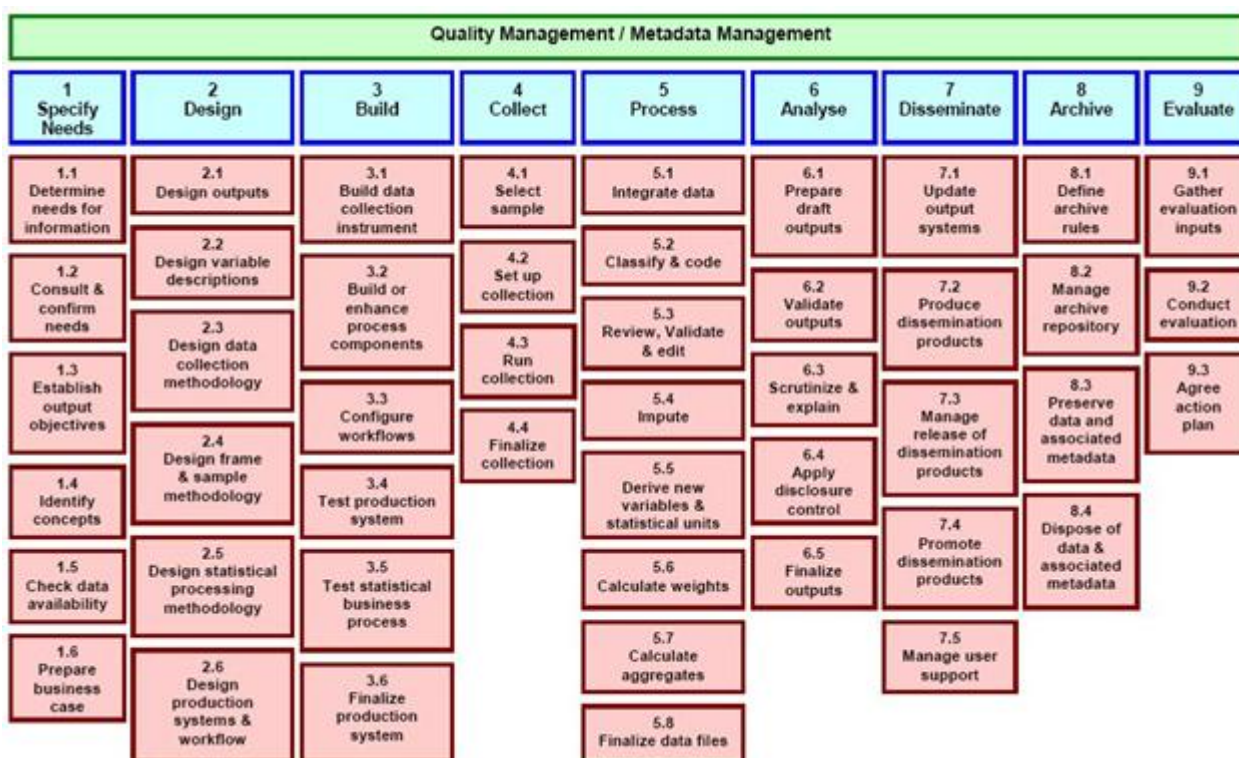
Level 0, the statistical business process;

Level 1, the nine phases of the statistical business process;

Level 2, the sub-processes within each phase;

Level 3, a description of those sub-processes.

Figure 2. The Generic Statistical Business Process Model (level 2) (UNECE 2009):



The final version of GSBPM was approved by the METIS Steering Group for public release in April 2009. In less than 3 years the model has been or is being adopted by several National Statistical Institutes (NSIs) and International Organisations.

The GSBPM has also proved to be useful as a reference model for quality assessment procedures. At Statistics Canada, for example, it was used to guide the discussions during the Quality Assurance Reviews in 2009 (Ref.]. Also within Statistics Norway the model has been used in general to assess the quality of existing approaches and documentation, and in connection with quality reviews. The model can for instance help to identify quality risks and problems related to the flow of data from each step to another, as well as inefficiencies related to processes and practices.

3. What is Quality and Quality management in Official statistics?

High quality should be the label which a statistical product should carry in order to be designated as ‘official statistics’. And it is of utmost importance that users maintain a high degree of confidence in the statistical organizations and its products. High and documented quality is also the main focus of the European code of practice and UN Fundamental Principles and of LPRs and the AGAs; what is the situation concerning different quality dimensions, how is quality in general managed, and not least, measured?

Thus the concept of quality in statistics has moved from a more narrow focus on ‘accuracy’ to the wider concept: ‘Fitness for use’. In order to define quality more precisely, one has to refer to several dimensions or criteria. The most common that we also can find in the code of practice and in the framework for LPRs, are:

- Relevance of statistical concepts
- Accuracy and reliability
- Timeliness and punctuality

- Coherence and comparability
- Accessibility and clarity

Thus Quality management is a challenging and necessary task – requiring a systematic approach and monitoring, and there are several issues which need to be addressed:

- How to organize quality work – centralized - decentralized? Need for a central methodological units, also with responsibility of quality reviews and training?
- Implement a systematic quality approach? (Total Quality Management (TQM), EFQM, Lean, ISO etc.)
- Process handbooks to ensure consistent quality and monitoring of quality?
- Implement targeted training program to ensure proper qualifications of key staff?
- Improved documentation of statistical processes and products?
- Internal audits?

A number of documents are available to support quality management in statistics; both from the Eurostat portal on quality and from other sources (see References and further reading).

4. *Efficiency – part of a total quality concept*

It is a general requirement for all organisations to be efficient by using resources in an efficient way. Thus this is also part of the framework provided by the European Statistics Code of Practice.

In general, efficiency can be quantitatively defined and determined by the ratio of output to input. It can also be expressed as: ‘doing the thing right’.

There are a number of issues which need to be taken into consideration in order to evaluate the degree of efficiency and efficiency improvements:

- Ability to measure internal use of resources (human, financial) allocated to different processes and products;
- Ability to measure the output and the way this meets user needs;
- Available relevant staff competences and training;
- Efficient organization of data collection, control and editing;
- Efficient use of administrative data;
- Ability to measure change in response burden;
- Availability of efficient and standardized IT tools and solutions.

In order to assess efficiency it is sometimes useful to compare and do benchmarking with similar organizations, preferably limited to specific and comparable products.

When improving the efficiency of the production processes there are also some more specific issues to be considered:

- Developing and implementing a business process model;
- Describing and analysing the present production processes: identifying critical bottlenecks, inefficient operations, possible areas of risk, availability of documentation;
- The interaction with external providers of administrative data – quality, access to micro data;
- The efficiency of existing regional organization;

- How to implement electronic data collection.

5. *Dissemination and user relationship*

Provided that the key quality definition is ‘Fitness for use’, it is of utmost importance to ensure a good relationship with users and to disseminate the statistical products in a user-oriented way. In order to do so there are several issues to be considered:

- Development of guidelines/policy for dissemination;
- How does a general user group function;
- The implementation of regular user surveys;
- The implementation of subject matter user groups;
- Re-engineering the web-site and establishing a user-friendly database?

When improving dissemination there are several useful guidelines provided by UNECE and PARIS 21 (see References and further reading).

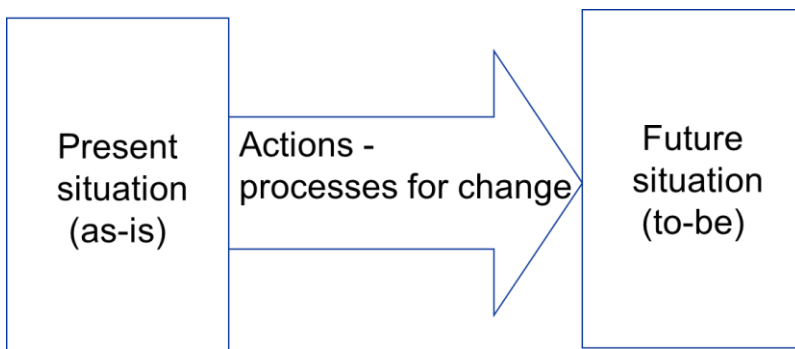
6. *Managing change in practice*

The AGAs and LPRs have in most cases resulted in a number of observations and recommendations also related to the topics of this article. It is easy to make recommendations but implementation and follow up may be difficult in the long-term. Therefore it is important that the organizations in question make their own review of the possibilities and make a realistic implementation plan.

Some of the issues to be considered are (see figure 3):

- Is the analysis of the present situation valid and “owned” by those who are involved?
- Is there a clear - and agreed – picture of what the future situation should be?
- Is it clear what actions should be implemented in order to change to the new situation?
- Are the means for change available? (legislative, financial, managerial, etc.)?

Figure 3. From the present situation to the future



Summing up the recommendations and tasks might add up to a major development programme which may also require new types of leadership, organisational and skills development, or even what can be called a cultural change of the organization. .

Some good advices to help managers in this transformation process can be formulated as:

- Create a sense of urgency - is the change necessary in order to be more efficient or ‘survive’?

- Involve the employees in developing ideas/projects – their knowledge is indispensable;
- Create a vision to direct the change effort – what is the overall goal?
- Communicate the vision;
- Delegate/empower others to act on the vision;
- Plan and create short-term wins – step by step approach;
- Consolidate improvements and produce more change;
- Ensure that new approaches are considered as the new standard of the organization.

Some key factors to ensure successful implementation of development actions might be:

- Good relations with external national partners – often as formalized cooperation agreements;
- Good cooperation with and support from other international partners and other NSIs;
- Management training – especially in management of change;
- Organizational culture fostering change;

Available key competences – project management, subject area competences, IT competences, etc.
Some concluding remarks

The exercises related to the AGAs and LPRs are a great opportunity for improving the statistical systems of the countries involved. The assessment and the recommendations from these exercises may seem overwhelming and will require proper planning and priorities.

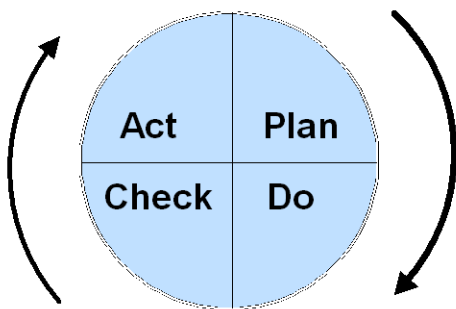
In this process it is also important to benefit from the experiences of others, which is the main purpose of this conference.

One should also consider that, even if many recommendations may be technical and have a limited scope, full implementation of all recommendations will require a more fundamental change of the culture of the organization and the need to establish a joint vision in which direction to move. In this context, training and involvement of all staff is crucial in order to move in the right direction.

Finally, improving quality and efficiency of the statistical production process is a continuous exercise:

Planning should be followed by implementation (DO). The degree of implementation must be checked or analysed against the expected results (CHECK). This might result in corrective actions (ACT) or the need for a new and revised planning, as illustrated in the famous graphs from one of the fathers of the Total Quality Management concept, (Deming 1986) (Figure 4).

Figure 4. The ‘Deming cycle’



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