

MAMANAGEMENT SEMINAR ON GLOBAL ASSESSMENTS

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WHAT MAKES AN EFFECTIVE AND EFFICIENT STATISTICAL SYSTEM

Paper by the UNECE Secretariat

I. INTRODUCTION

1. The Oxford dictionary defines the words 'effective' and 'efficient' in the following way:
 - **Effective:** having an intended or expected effect; able to accomplish a purpose; actual; usable;
 - **Efficient:** being effective without wasting time or effort or expense; productive with minimum waste of effort;
2. Today, the ongoing financial and economic crises have highlighted how policymakers, the media and academia are dependent on high quality and relevant statistics to develop, report on and analyze economic, monetary, environmental and social policies. As a consequence, there is increasing pressure on statisticians to produce better, more and up-to-the-minute statistics while, at the same time, most statistical offices are experiencing budget constrains. In such conditions, it is crucial to be effective and efficient.
3. But these are not new conditions. Already back in 1995, an article by Ivan Fellegi, *Characteristics of an effective statistical system, Morris Hansen lecture* describes the need for a 'healthy and strong' statistical system to respond to the needs:

“Developed countries are going through a period of turbulence and restructuring. . . . The main social, economic, and environmental concerns are seen as exceedingly complex, multi-faceted, and having an enormous impact on our future. Those concerns are going to be tackled whether or not the relevant statistical information and analysis are available. Given the power of rational policy development, the availability of a strong and healthy statistical system can have a determining impact on the outcome of this process of reexamination and restructuring. . . .

. . . . But such an information system is characterized by its ability to illuminate issues, not just to monitor them, by its ability to evolve in response to needs; indeed by its great ability to be aware of priority information needs and by its capability to set priorities. Such a system must have a high level of public credibility, since few in society can verify national statistics and therefore most have to rely on the public reputation of the agency providing

the statistics. As part of this credibility, the system must be free from undue political interference.”

4. The issues of what makes a statistical system effective and efficient, how to increase the efficiency and productivity of the statistical offices, how to organize a national statistical system and how to measure the statistical offices’ performance have been discussed by the Conference of European Statisticians (CES) at a number of seminars over the last ten years. Useful information and good practices can be found in the papers presented at the following plenary sessions:

- 1999;
- 2004 seminar on National statistical systems;
- 2007 seminar on Increasing the efficiency and productivity of statistical offices;
- 2009 seminar on Balancing principles of professional autonomy and accountability with the mandate to produce policy relevant data.

5. The papers presented at these seminars can be consulted on the following web site:
<http://www.unece.org/stats/archive/00.02.e.htm>

II. BACKGROUND

Fundamental Principles of Official Statistics

6. The need for guidance on how to build up a statistical system and what should be its basic principles became very evident for the transition countries at the beginning of nineties when countries of Central and Eastern Europe began to change from centrally planned to market-oriented economies. This change brought along the need for complete transformation of the national statistical systems. Part of this transformation process was about redefining the role of official statistics, as well making it clear to governments and other users of statistics that a good system of official statistics must meet certain general criteria. In order to get this message across, and to assist heads of national statistical offices, the Fundamental Principles of Official Statistics were developed.

7. The Fundamental Principles of Official Statistics were adopted by the Economic Commission for Europe in 1992 and at a global level by the United Nations Statistical Commission in 1994. Since then, official statisticians in many countries have referred to them to improve and make their statistical systems more effective and efficient. The UNECE secretariat has also used them in advising the countries with transition economies how to build ‘healthy’ statistical systems according to the international standards. These principles are listed below:

- Relevance, impartiality and equal access;
- Professional standards and ethics;
- Accountability and transparency;

- Prevention of misuse;
- Sources of official statistics;
- Confidentiality;
- Legislation;
- National coordination;
- Use of international standards;
- International cooperation.

8. It should be noted that the United Nations Principles are formulated in a flexible way in order to allow countries to decide on the most suitable way to implement each of the principles in a particular national setting. However, this openness should not be interpreted as whether to implement the principles or not. Furthermore, the method of implementation chosen in a given country should cover the whole system of official statistics, and not only selected areas or be limited to the activities of the national statistical office (NSO).

9. The statistical systems of the countries in Central and Eastern Europe have developed considerably since the fundamental principles were adopted. However, there is still need for more knowledge and experience in their practical implementation. Today, when talking about the fundamental principles the discussion is usually focused on specific aspects of their implementation and on practical issues of making the principles operational taking into account the specific situation in the countries. There are many practical questions that need to be solved in order to implement the principles in real life and global assessments have a very important role in this respect.

Global assessment of national statistical systems

10. In the last several years, the UNECE secretariat has been involved as a partner with other organizations in conducting global assessments in several countries of the UNECE region. In preparation for this work, a concept note was developed about the purpose and main features of a global assessment of the National Statistical System to guide the work of the secretariat. This is further discussed in the last section of the paper.

III. WHAT MAKES AN EFFECTIVE AND EFFICIENT STATISTICAL SYSTEM

11. Statistical systems are complex entities whose successful functioning requires a multiplicity of conditions to be satisfied. It is easy to identify three main indicators of success:

- How effectively does the system meet the priority information needs of its users? The underlying question is how adaptable is the system in adjusting its products to evolving needs?
- How effective is the system in exploiting existing resources and data to meet client needs?

- How credible is the system in terms of the statistical quality of its outputs and its nonpolitical objectivity?

12. The sections that follow focus on a few selected issues related to the effectiveness and the efficiency of a statistical system drawn from discussions within the Conference of European Statisticians. The recommendations made during these discussions could be used as good practice in strengthening the national statistical systems in the countries.

Importance of statistical programmes and strategic planning

13. The strategic planning of the work is very important to ensure the effectiveness of statistical programmes. When considering the effectiveness of statistical programmes, three main topics could be mentioned: how to identify user needs; how to match increasing needs with limited resources; and how to measure the outcome and whether the user needs are met. In this context, the following issues should be kept in mind:

- The strategic planning should consider the role of respondents; maintaining high response rates and reducing response burden should be a high priority for statistical offices;
- The long-term perspective has to be taken into account, while policy users are often driven by current issues;
- Interacting with user communities with different time horizons (e.g. policy makers, researchers) can help the statistical offices better balance the long-term and the current needs;
- Since it is difficult to forecast the user needs for years to come, some flexibility should be built into the system, allowing to accommodate new needs as they arise;
- Statistical offices have to be proactive in reaching out to new types of user communities.

14. In assessing the effectiveness of statistical programmes, the following measurement tools could be used: user satisfaction surveys; coverage by the media; website hits; use of statistics by governments and researchers. While these indicators are useful, they alone do not show the impact of statistics. Direct interaction with stakeholders and users can help to obtain information on their needs and expectations.

15. In addition, international quality frameworks and effectiveness benchmarks are helpful in analysing the effectiveness of statistical programmes, as well as in communicating with users and stakeholders..

16. The long-term strategic thinking is important; however, there should also be some flexibility allowing for change when necessary.

IV. EFFICIENCY OF STATISTICAL OFFICES

17. The efficiency of statistical offices is normally considered in terms of trade-off between outputs and resources used. The following issues should be taken into account:

- Data collection is the most expensive stage of statistical production, so its optimization is vital. Therefore, the analysis of the costs of all phases of statistical production is an important tool for decision-making. Not only the costs of the statistical office but also those of the respondents should be taken into account;
- The use of administrative data is considered as a way to reduce costs. However, the related problems need to be carefully managed and the quality has to be continuously monitored. In countries where high quality administrative registers exist and there is a positive public perception of their use in statistics, they are an efficient method of data collection. For some countries, the use of administrative data can be challenging. It may be difficult to ensure public compliance or to overcome negative perceptions about the protection of confidentiality of administrative data;
- Linking or matching different administrative data sources can provide efficiency gains, but poses a high level of risk because of the related privacy and confidentiality concerns;
- Standardising business processes is a valuable opportunity to achieve productivity gains and make the work processes more transparent;
- The right skills and competencies of staff are key to increasing efficiency and productivity;
- The organizational and methodological approaches to generating efficiency are important;
- Decisions on mechanisms for increasing efficiency need to be made at each stage of the statistical production cycle that has impact on outputs.

18. In order to determine effectiveness and efficiency of a statistical system, it is important to be able to measure the results (benefits) and the costs. In this context, the exchange of experience among countries in the region and learning from each other could be very helpful.

V. SOME ELEMENTS OF AN EFFICIENT STATISTICAL SYSTEM

Role of NSOs in coordination of the statistical system

19. Coordination within national statistical systems is a necessary precondition for securing the comparability, coherence and completeness of statistics – important attributes of the quality of

statistics. The purpose of coordination is to make the statistical system act as a coherent system, instead of a collection of separate institutions.

20. The tools for coordination can be the authority to establish classification schemes, arrangements for joint data collection, the authority to consult with all other agencies involved in statistical activities, joint training programmes, rotation/exchange of staff, etc.

Assess and balance priorities

21. Setting the right priorities is important. National needs should receive particularly high priority because the major issues facing the country should be decided on the basis of relevant information, available for all to analyze and discuss. Nevertheless, not all those needs can be satisfied, so priority decisions are unavoidable.

22. Even when an issue arises as a result of the government agenda, the range of information needed to illuminate the issue should not be determined on the basis of government needs alone. All the main stakeholders should be listened to. Non-governmental users therefore need separate attention and a number of specific mechanisms can be used to learn about their needs.

23. The range of non-government client groups is varied, so a variety of mechanisms have to be used to gain an understanding of their needs. The following approaches can be used: professional advisory committees, client oriented program evaluations, interactions with professional and business associations, market feedback and an internal analytic program.
Client orientation and relations with stakeholders

24. The ultimate test of the statistical system is its ability to satisfy the needs of its clients. Good planning is important to ensure that the products of the statistical office evolve in response to the changing needs of society. Different client groups have their particular requirements and, for an efficient dissemination system, these have to be taken into account.

25. Statistical systems vitally depend on active support from the different stakeholders. In addition, the statistical office needs the support of the general population and the perception that its work is important. Therefore, it is essential to have an effective public information approach.

26. For good relations with businesses, it is important to assure them concerning confidentiality, minimize the reporting burden and maintain active liaison with business organizations so that they are aware of the purposes for which the statistical data collected from them is used and how this information can be beneficial for their own economic activity.

Measuring the performance of statistical systems

27. The definition of efficiency and effectiveness of a statistical system raises the question of how to measure it. An increasing interest in the topic has been raised in a wider context of evaluating the efficiency of the public sector. It has been discussed at different fora, including at a special seminar at the CES 2007 plenary session.

28. There are different needs for performance measures: for internal purposes as diagnostic tools for the senior management to assess the effectiveness and performance of the office; and for external purposes to provide assurance to stakeholders for the responsibilities placed on each NSO.

29. The effectiveness of a NSO depends largely on its credibility. Openness regarding the operations of the office is a prerequisite for building confidence and a balanced and open approach to the measurement of its performance will serve to strengthen the office's reputation.

VI. THE ROLE OF GLOBAL ASSESSMENTS

30. As mentioned earlier, the UNECE secretariat has developed a concept note to guide its work on global assessments. It defines the purpose and scope of global assessments in the following way.

31. The purpose of a global assessment of a national statistical system is to provide a clear picture of the state of development of official statistics in a country. Its aim is to help with the following:

- The NSOs to better plan the long-term development of statistics;
- The international donors to have a better knowledge of the institutional and administrative framework for planning statistical cooperation and technical assistance.

32. The main aim of the assessment is not to give a (good or bad) mark to the statistical office (and its Chief) but rather to identify the areas for improvement in the national context and help establish priorities for improvement.

33. The assessments are focusing on three levels:

- The legal and institutional aspects of the national statistical system;
- The technical and organizational capacity to produce and disseminate official statistics in all relevant areas;
- The compliance with international standards, norms and recommendations.

34. The global assessments aim to address all the elements of an efficient statistical system, as listed previously in this paper. This is reflected in the recommended list of topics for the global assessments (presented in the Annex) which cover the legal and institutional setup, relations with government, protection of independence of the statistical system, data protection and confidentiality, internal organization, planning and priority setting, resource management, external accountability, mechanisms for user consultations, dissemination policies, etc.

35. The assessment does not focus exclusively on the NSO but encompasses all major producers of statistics in a country. Thus, the assessments are a unique opportunity to obtain a comprehensive picture of the whole statistical system at all levels.

36. In addition, the global assessment could provide other side-benefits that can be useful, namely:

- Global assessment is an opportunity to obtain advice from experienced international experts on general strategic and managerial issues;
- It permits discussion and analysis in a real situation in a country on how to implement the fundamental principles (FP) in practice. For example, how to guarantee the independence of the office, how the NSO can coordinate the statistical system in practice;
- The Global Assessment report can provide a backing, an authoritative source to prove that the statistical office acts according to internationally accepted principles. This can be very useful in dealing with delicate questions such as confidentiality, simultaneous access for all users, professional considerations, carrying out the coordinating role of the statistical system, etc.;
- It can provide an “innocent outsider” view and help establish priorities for improvement in conditions of limited resources.

37. Finally, the success of the global assessment critically depends on the good cooperation between the statistical office and the assessment team. Openness and transparency on both sides significantly contribute to the process and help to ensure that the outcome is useful for improving the official statistics in the country. Opening the office for a professional scrutiny by international experts is a sign of strength, not weakness.

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ANNEX
Global Assessment - Sample List of Topics

Legal setting

- Statistical law
- Other legislation, including censuses
- Statistical council, statistical programme, inter-ministerial consultations, consultations with users
- Protection of independence
- Data protection and confidentiality

National statistical system

- Principles
- Structure of the system
- Liaison with research institutes and universities
- Liaison with the business community
- Dissemination policies
- Relations with the central government
- Relations with local governments
- Access to administrative records

Description of the National Statistical Office

- Mission, internal organisation
- Planning, programming, and priority setting
- Monitoring of quality
- Organisation of large-scale surveys
- Finance and budgeting
- Staffing, staff recruitment and training
- Information technology
- Internal monitoring of performance
- External accountability

Technical part

- Classifications
- Registers (population, business)
- National accounts
- Population statistics (censuses, migrations, vital statistics)
- Household surveys (labour force, household budget)
- Prices statistics
- Business statistics (short term, structural statistics)
- Basic agricultural statistics
- Education and health statistics
- Foreign trade statistics
- Government finance and public debt statistics
- Monetary and financial statistics
- Balance of payments statistics