

QUALITY - KEY ELEMENT OF DEVELOPMENT OF OFFICIAL STATISTICS

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ABSTRACT

The assessment of the activity of National Bureau of Statistics (NBS) regarding compliance with the European Statistics Code of Practice reveals that NBS observes to a large extent the examined CoP principles.

At the same time, there are problems related to the implementation of a performing system of quality management.

One of the key problems is that of adequacy of resources, especially at human ones.

The improvement of the structure and of the functionality of NBS, the larger access to administrative data, the implementation of the new IT concept, focused on re-designing and modernization of the statistical data production and dissemination architecture will contribute to the increase of the efficiency of statistical activity and the alleviation of resources constraints.

Quality has become a central issue in the European Statistical System (ESS), but also a key aspect in the integration of the national statistical systems into ESS. A systematic approach to quality was adopted in many institutions. This is based on some common and basic principles of quality management.

At the European level, an important step to this respect was the adoption of the European Code of Practice (CoP) by the Statistical Program Committee on 24 February 2005. Code of Practice, ensuring the coverage of such aspects as the institutional environment, statistical processes and of statistical output within the European Statistical System has an ambitious approach of quality in statistics. The Code describes the common European principles of quality and is based on the experience obtained in the previous period. With the adoption of the Code of Practice, the EU Member States committed themselves to adhere to its principles. For monitoring the compliance of the NSI of Member States with the 15 principles of the Code, a monitoring procedure has been set up. The self-assessments of the countries are combined with elements of peer review, the compliance to CoP being evaluated and monitored based on the explanatory indicators contained by every principle of the Code.

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Evaluation of the compliance of the Moldovan official statistics with the selected principles of the Code of Practice

For evaluating the compliance of the NBS activity with the quality principles stipulated in the Code of Practice, the self-assessment questionnaire had been used. The ESS national statistical institutes and Eurostat had completed such questionnaire, during December 2005-January 2006. Thereafter, this exercise was followed by some external reviews (peer review). The peer-review results had been introduced in the Report on the implementation of CoP, presented by Commission to the European Parliament and Council in 2008. The peer reviews had been limited only to those parts of the Code that refers to the institutional environment (principles 1-6 of CoP) and to the dissemination (principle 15).

The evaluation presented below is also focused on the compliance of the NBS in its activity with these principles. As NBS is the most important producer of official statistics of the Republic of Moldova (the statistical system can be characterised as centralized), the evaluation of the activity of NBS according to the CoP criteria largely characterizes the situation regarding the compliance of the NSS as a whole.

Principle 1: Professional independence

The statistical activity in the country is advantaged by the existence of a good legal basis - the Law on official statistics (hereinafter called "statistical law") adopted by the Parliament through the Law no. 412-XV of December 9, 2004. The non-interference of policy, political, regulatory and other interest groups is clearly stated in Article 5 of the Law. The Central Statistical Body (CSB) is authorized to establish - in an impartial and independent manner, free from any pressure from the Government, political parties, ethnic groups, trade unions and other organisations or natural persons - systems of indicators, nomenclatures, classifications, methodologies, data sources, registration and processing techniques, to disseminate statistical information. In practice, this mandate is fully observed by the CSB.

As regards the mandate of SCB to decide on the statistical methods, standards and procedures, this is clearly stipulated in the statistical law as well. The statistical authority is under obligation to make available official statistics to all categories of users, in terms of equality, simultaneity and non-discrimination regarding the quality and timing of statistical releases, which are strictly observed.

All the statistical activities of NBS are part of the Annual Program of Statistical Works (PSW), performed independently and transparently. These responsibilities are observed in a professional and impartial manner, free from the influence of a third party.

Principle 2: Mandate for data collection

The mandate for data collection by NBS is stipulated in the statistical law, in the Annual Program of Statistical Works and is sufficient for the performing of statistical surveys. All statistical surveys included in PSW are compulsory for the respondents. Sanctions for non-compliance by respondents are provided in the law, but they are only used if other measures are not efficient to obtain primary data from the reporting units.

The statistical law (art.19) allows the access of NBS to the administrative data sources (ADS), necessary for production of official statistics. These activities are also included in PSW. When the access to ADS is performed, it is based on protocols signed by NBS and institution-source, reciprocally negotiated. Sometimes, the data transmission is limited to aggregated data.

The potential of using the ADS are not fully explored yet. In some cases, especially when certain provisions from other laws contradict Article 19 of statistical law, the access of NBS to administrative data is limited.

Principle 3' Adequacy of resources

The personnel of NBS consist of professionals with extensive experience in statistical activity, high responsibility, creativity and initiative regarding the development of methods, processes and statistical products. However, the high turnover of the staff, especially among highly skilled statisticians and well trained young people, is a problem that decreases the capacity of the Bureau to meet the ever growing information requirements at the internal and international level (especially in the perspective of European integration). One of the main reasons for such a high staff turnover is the relatively low level of salaries. Another reason is the unattractiveness of the civil servants' promotion system for highly qualified people.

It is crucial the need to rationalise NBS's Information Technologies f IT) applications and adopt solutions which have wider usage. This issue is addressed in the IT development Concept, approved recently by Government, whose implementation will provide the opportunity to re-examine and modernize the information flow within the NSS.

Principle 4: Quality commitment

Assuring the high quality of statistical data, including micro-data constitutes a permanent concern of statisticians at all stages of statistical activity. At present, timeliness and punctuality are basic criteria in the management of statistical processes.

From institutional and organisational point of view, the existence of two consultative bodies, Statistical Council (SC) and NBS Board represents a guarantee for promoting surveys coherent with users' needs (SC) and adopting appropriate methodologies (Board).

External review of NBS statistical products is practiced, being very beneficial for SSN development. IMF, the ROSC framework did the review in several statistical fields, related to indicators that are part of SDDS in 2005. In 2007, global evaluation of Moldovan national statistical system according to EU standards was carried out.

Although the reference to quality issues is regularly done in the documentation on current activity and on future strategy of NBS, quality commitment is not yet fully integrated in the management and implementation of statistical products and processes. Thus, quality monitoring does not belong to an integrated system of quality management. The lack of skilled human resources in the field and their high mobility, as well as inadequate level of IT development represent critical factors for integration and standardization of the processes among the production units and to develop a quality management system within the organisation in general.

From the viewpoint of legal framework and implementation of legal stipulations in the NBS activity, this principle is strictly respected. Chapter 4 of statistical law regulates data confidentiality, addressing the interdiction of disclosure aspect of confidentiality, as well as the strict limitation of confidential data to statistical use. There are strict procedures applied for external users that access statistical micro-data for research purposes.

All staff, including temporary personnel, has to sign a Confidentiality Undertaking. The obligation to keep data confidential is valid beyond the termination of the contract.

Principle 6: Impartiality and objectivity

NBS commitment related to scientific independence, objectivity, transparency and impartiality is based on the adequate legal framework and executed de-facto.

Objectivity and neutrality are key characteristics of all statistical publications and press releases. The sources and production methods of official statistics chosen by NBS are solely driven by statistical considerations. There are two important statutory structures, which guarantee that statistical considerations prevail over any other reasons: two high level professional advisory bodies: (i) Statistical Council and (ii) NBS Board, the last one providing a *permanent* methodological support and statistical expertise.

NBS treats all users in an absolute impartial way. All users have equal and simultaneous access to statistical releases and publications.

Principle 15: Accessibility and clarity

According to legal stipulations, NSO should produce and disseminate objective and reliable statistical information and provide all users with equal access to statistical data. Dissemination is a key policy for the institution. Taking into account that NBS is a public institution and official statistical data is „a public good”, all the information, including statistical publications, is put at disposal of users by means of NBS site, free of charge.

Generally, users of various categories are largely satisfied by the accessibility to information provided by the NBS, information considered to be clear and easily understandable. The results of user satisfaction survey carried out in 2008 shown that for 54 % of respondents, statistical data is easily understandable and for 11 %, even very easy to understand.

Information on methodologies and data sources of statistical products is widely documented and it is exposed on the site. Taking into account the results of user satisfaction survey carried out in 2008, most of respondents (77%) consider that methodological explanations provided by NBS are sufficient and adequate. Description of metadata is standardized according to Euro SDMX Metadata Structure (ESMS), applied at EU level.

Comparative analysis of assessment results

Self-assessment of compliance of Moldovan statistics (based on NBS example) with principles stipulated in the Code of Practices, based on the analysis and evaluation of respective indicators according to CoP, in comparison with the state of art in ESS states, points out the following:

Table 1. Assessment of compliance of ESS (NSIs) and Moldovan statistics (NBS) with CoP

CP principles	Assessemment results of CoP indicators, %			
	Fully met	Largely met	Partly met	Not met
ESS (NSIs) [3]:				
1. Professional independence	76	18	5	1
2. Mandate for data collection	83	14	3	0
3. Adequate resources	19	43	38	0
4. Quality commitment	20	37	41	2
5. Statistical confidentiality	86	11	3	0
6. Impartiality and objectivity	71	24	5	0
15. Accessibility and clarity	45	41	14	0
Total	62	25	12	1

Table 1. Assessment of compliance of ESS (NSis) and Moldovan statistics (NBS) with CoP (cont.)

CP principles	Assessemnt results of CoP indicators, %			
	Fully met	Largely met	Partly met	Not met
Republic of Moldova (NBS):				
1. Professional independence	57	43	0	0
2. Mandate for data collection	67	33	0	0
3. Adequate resources	0	0	100	0
4. Quality commitment	0	40	60	0
5. Statistical confidentiality	80	20	0	0
6. Impartiality and objectivity	71	29	0	0
15. Accessibility and clarity	33	50	17	0
Total	51	34	15	0

In the Republic of Moldova, the situation is almost similar to the one existing in most of the countries within ESS in terms of legal provisions, commitments and practices of the national statistical institute regarding: statistical confidentiality, impartiality and objectivity, the mandate for data collection, professional independence. According to the results of self-assessment, based on the use of quality indicators, the CoP principles are "fully" met in the Republic of Moldova for 80-57 % of the indicators and "largely met" for 20-43 % of the indicators (in comparison with the average level for ESS countries, respectively 86 - 71 % and 11-24 %). Despite the fact that ensuring transparency, accessibility and clarity is a very important dimension of the NBS activity, supplementary efforts are still necessary in view to improve the situation in this respect, in order to achieve the European states level.

At the same time, there are great problems related to the implementation of quality management and resources adequacy. In the Republic of Moldova, these CoP principles are only "partly" met. Although the situation related to the compliance with the mentioned principles is much better at European level than in Moldova, the improvement of resources and of quality management constitute major challenge for many states from the ESS as well.

It is to be mentioned the analysis limits, since the evaluation of NBS activity was done based on the assessment carried out by author in October 2010, while the data related to the situation existing in the ESS are based on the results of external assessments, carried out during 2006-2007, presented in the Commission Report of 2008 [3].

Improvement activities

The analysis of the results of self-assessment on the level of compliance of NBS with the principles stipulated in the Code of Practice pointed some major gaps. Below some activities for further improvement of the compliance with the CoP are mentioned.

Principle 1: Professional independence

Thorough analysis of the use of official statistical data, in view to identify and to speed up the reactions to erroneous interpretation and misuse of statistics.

Principle 2: Mandate for data collection .

Carrying out the NBS' assessment of administrative data sources, aiming at their possible use for official statistics purposes and further collaboration with the owners of ADS, in view to get the access to additional data that are relevant for statistics.

Principle 3: Adequacy of resources

Improving the structure and the functionality of units within the NBS system.

Collaborating with decision-makers in view to set up the NBS staff earnings, at the same level with other central administration authorities.

Implementing the new IT concept, envisaging the redesign of statistics production and dissemination architecture, etc.

Principle 4: Quality commitment

Drawing up a strategic plan in view to implement the quality management system in accordance with the European best practices.

Principle 6: Impartiality and objectivity

Regularly organising press conferences to communicate factual results and increase the number of products with impartial analytical results and series with analytical components (such as seasonally adjusted time series, etc.).

Principle 15: Accessibility and clarity

Increasing the number of series in the data bank. Extending the meta-data described in the standard approved by BNS.

Promoting the statistical culture among the users.

Regularly carrying out user satisfaction surveys.

Conclusions

The assessment of the activity of National Bureau of Statistics (NBS) regarding compliance with the European Statistics Code of Practice reveals that NBS observes to a large extent the examined CoP principles. In the Republic of Moldova, the situation is almost similar to the one existing in most of the countries within ESS in terms of legal provisions, commitments and practices of the national statistical institute regarding: statistical confidentiality, impartiality and objectivity, the mandate for data collection, professional independence.

At the same time, there are problems related to the implementation of a performing system of quality management. The need for a systematic approach of quality measuring and reporting, based on the tools recommended according to the European best practices is obvious.

One of the key problems is that of adequacy of resources, especially at human ones. The improvement of the structure and of the functionality of NBS, the larger access to administrative data, the implementation of the new IT concept, focused on re-designing and modernisation of the statistical data production and dissemination architecture will contribute to the increase of the efficiency of statistical activity and the alleviation of resources constraints.