

Issues of quality assurance: conceptual approach and practical works (Azerbaijan experience)

Introduction

Quality assurance in the practice of international statistics became one of the most actual issues of the last years. International calls related with quality assurance have increased; the basic principles, standards and criteria, as well as a number of methodologies were respectively prepared, defined and developed. Working and expert groups have been established for coordination and improvement of activities on a global scale.

General overview

As regards content, the term “quality management” in statistical system has significantly changed in comparison with previous 5-10 years and gone beyond the “statistical product quality”. At present along with product quality, the concept “quality” is directed to quality management of statistical system, institutional environment and statistical processes in accordance with the basic principles. Implementation of these principles involves provision of statistical data comparability at international and national levels, quality improvement of statistical data processing, provision of interrelation of information system and resources. There is no doubt that, realization of activities requires application of quality management system, its methodological and practical accessibility in national statistical offices.

Motivating factors

Since 2010 more attention had been paid to creation of quality management system in official statistics’ of Azerbaijan. International calls, priorities as well as recommendations related with creation of quality management system indicated in “Global Assessment of official statistical system of the Republic of Azerbaijan”, which has been carried out by such influential international organizations as UNECE, Eurostat and OECD had a great impact. Quality assurance in official statistics of Azerbaijan became one of the most actual issues of the last years, single approaches were defined. Provision of organized nature became possible due to sequential decisions of the management. It is no coincidence that during 2012-2013 the SSC discussed at the meetings of Board 22 issues related with quality management (9.1% of total discussed issues or each 10 issue), including 190 measures. At the same time, issues of most importance were discussed at the meetings of Statistical Council. Quality assurance forms the basis of the State Program confirmed by President of the Republic of Azerbaijan on “development of official statistics during 2013-2017” and different events were considered.

Organizational support

The State Statistical Committee had announced about its policy and objectives, developed Actions plan, created coordination council, appointed a representative and established independent division. The main purpose of all implemented activities is execution in the country statistical processes and data quality based on defined components and criterions. This article briefly reflects current situation of Azerbaijan's official statistics and analyzes fundamental principles (management of statistical system, institutional environment, statistical processes and products) of quality assurance of implemented works and conceptual approach to the country practice.

Management of the system

There is a centralized system for provision of statistical system's coordination in the country and that's why the SSC is main central executive authority in this field. The Law on official statistics has been adopted, the coordination role of the SSC was prescribed by the law, and the Statistical council consisting of representatives of the producers and users has been established. The President of the country confirms long-term State Programs, the statistical works program is being developed every year and implementation of these programs in the territory of the country is mandatory. At the same time, with the aim to widely use administrative data and decrease respondents burden the agreements related to data exchange with other public authorities were signed. To conduct regular discussions with stakeholders, study its requirements, create close cooperation with representatives of media, and assess the main interests of users, public debate of drafts of the documents, awareness of users about changes serves for creation of good relations and offers the best possibility for application of statistical standards.

Management of institutional environment

Inadmissibility of outside organizations' intervention in provision of professional independence was established by legislation. The status of chairperson is the same with the status of chairpersons of other ministries and central organizations. Issue of statistical products is being decided freely, statistical works program is published, activities related with misuse and interpretation of data are implemented. With the aim to assure equity and objectivity the Code of Practice is applied in statistical offices, data and press-release calendar is presented in advance, and its timely delivery to all users is provided, administrative rules related with data access's procedures is available. Attention is paid on transparency of data. Information on statistical activities is

accessible and reflected in webpage. There is written standards on dissemination policy; catalogue of statistical publication, information on budget of statistics is published in press and accessible. Confidentiality of data is proved by the Law. Responsibility related with breach of confidentiality is stipulated, technical and organizational activities are implemented with regard to data protection. There are rules on using microdata for research purposes. The Committee stated quality assurance, the Global Assessment of statistical activity has been implemented, and IMF monitoring has been organized. In spite of sufficient resources in the country, new technologies are applied widely.

Management of statistical processes

One of the main terms of preparation of national methodologies is to ground on international sources. Documentation of methodological changes, its harmonization and discussion in scientific-methodological council is provided before adoption; preparation of organizational plan of observations as well as changes, assessments and availability of methodological documents related with descriptive statistics have a great importance. Carrying out of monitoring of expenditures for surveys, decreasing of respondents' burden, application of ICT equipment and collection of e-report forms, extension of coverage of sample surveys, carrying out assessments based on administrative data without implementation additional survey serves to increasing of economic efficiency. E-documentation system is being applied with the aim of effective organization of execution mechanism, working plans are being prepared and processes are being automated and documented. Special control is being applied to adopted decisions, written notes with regard to database management and archiving is being conducted and taken protocol. At the same time, e-reports system is applied, administrative sources are widely used for "smart report" project. Different report and different periodicity is applied to small enterprises, respondents are informed about reports, information burden is measured and suggestions are presented to government.

In order to management statistical processes the Joint UNECE/Eurostat/OECD, Generic statistical business process model version 4.0 2009 has been applied by the SSC. Based on this model the standardization was carried out by means of creation of metadata on main stages of statistical activities. Model gives opportunity to coordinate activities with Human Resources and to operate system based on defined technological scheme.

Management of statistical products

Regular meetings are being organized with users in order to achieve actuality, monitoring of users' comments and remarks is being carried out, metadata based on reports and indicators are being developed, projects are being discussed in public debates. The draft of the next five year State Program was included in webpage, participation in regional and international measures are provided, regular surveys on

users' satisfaction are carried out. There are rules on data updating, sample errors are estimated, explanation with regard to corrections are provided, reports on data quality and discipline on reporting are prepared regularly. The period of dissemination of data corresponds to international standards and access to previous data is provided. There is time-schedule for data collection, processing. Format of output data is prepared in accordance with international requirements; modern ICT resources are used for dissemination. There is "hot line" in the Committee. Actions plan for 2012-2013 on metadata management was implemented successfully; metadata by both observation forms and indicators were included in database. Conception related to metadata system and statistical dictionary was developed. There are quality documentation procedures.

Monitoring and certification of results

For the purpose to control the establishment of quality management system in the State Statistical Committee the internal audits were organized and hereafter the complex analysis of audits' results were carried out. Generally, the audit became an effective tool for revealing shortages, weak and strong points. Audit consultations enabled to share experience; works in all departments are better regulated after audit; the level of execution of requirements is increased.

The indicated practical works created good possibilities for carrying out the outside certification audit and despite the less time passed since the establishment of quality management system the "**Bureau Veritas**" company issued a certificate of international competence on correspondence of QMS with ISO 9001:2008 standards.

Targets

Main target of Azerbaijan statistics is not only to establish the system; but to take measures for its keeping in working order and sustainable development, so in this case the system operates effectively and potential strengthens, employees fill with enthusiasm and organizational prestige between the interested parties is increased.

All achievements in the field of establishment of quality management system, including meeting of user needs on data and metadata, increasing of employee's capacity and qualification, receiving of certificate of international competence, increasing of quality management experience enable further targets to be gained.

Next step of the State Statistical Committee in this field is to establish QMS in definite local statistical offices. For this purpose a number of measures should be taken. The activities such as organization of training seminar in local statistical institutions, preparation of documentary procedures, organization of internal control audits of quality management system in local statistical bodies and receiving of certificate of international competence of QMS by local statistical bodies are foreseen.

Systematization based on information technologies and its integration to ICT is one of the main calls. It is necessary to establish and automate the coverage of available system, scheme of management of processes from Committee to department, from department to area, from area to survey, from survey to indicators. One of the main targets to be achieved is benefit of executors from the system and enhancement of activities on “knowledge maintenance”.

XXX