Process documentation experience of Official Statistics

of the Republic of Azerbaijan

The presented document reflects information about the necessity and principles of process documentation in Official Statistics of the Republic of Azerbaijan and the procedures in the State Statistical Committee (hereinafter referred to as the SSC) that would be practice exercise for statistical institutions of several countries, the structure of the "Control of Documents" (QMS P 01-12) procedure, records according to the requirements of ISO 9001:2008 international standard, application of GSBPM in the SSC, process maps, processes and maps of local statistical bodies, as well as application of GSBPM in management of statistical processes on conduction of agricultural census.

Necessity and principles of process documentation

Taking into account the necessity of improvement of Official Statistics the SSC has begun to implement appropriate measures in this direction since 2010 basing on Total Quality Management principles (*Customer focus*, *Leadership*, *Involvement of people*, *Process approach*, *System approach to management*, *Continual improvement*, *Factual approach to decision making*, *Mutually beneficial supplier relationships*). Adherence of process approach principle is presented in the policy and purposes of the SSC in the field of quality. Policy and purposes in the field of quality for the 2014 confirmed by the Decree of the SSC dated 10 December 2013 had been traditionally disseminated among departments, posted on official web-page (http://www.stat.gov.az/menu/2/quality/indexen.php) and internal network; the necessity of documentation of available processes had been brought to attention of personnel in the context of both international statistics requirements and Quality Management System (hereinafter referred to as QMS) ISO 9001:2008 standard requirements.

Core of process documentation consists of control of planning and efficiency of the results of each process as well as precise definition of participants, input-output and essential resources required for implementation. Moreover, there are put some requirements regarding to implementation of the process of documentation and these requirements are reflected in the "Control of Documents" procedure. This procedure defines the content of documents, rules on preparation and compilation, agreement, approval, registration, application, analysis, updating, record and maintenance. Compliance of implementation of documentation with the indicated rules is defined during internal and external audits in the result of analysis of own activity by the departments and plays a great role in quality assessment.

Procedures in the SSC

Above mentioned procedure "Control of Documents" (QMS P 01-12) as well as the "Control of Records" (QMS P 02-12) that defines rules for keeping records such as confirmation of compliance of the implemented activities with QMS requirements and efficiency of the system activity, "Internal Audits" (QMS P 03-12) that defines procedure rules for planning, preparation, implementation and using of the results of QMS internal audits, "Control of Non-conformities" (QMS P 04-12) that defines rules on control of the revealed discrepancies, "Control of Corrective and Preventive

Actions" (QMS P 05-12) that clarifies the process of implementation of corrective actions for the revealed discrepancies as well as preventive actions to avoid discrepancies in case of potential problems, "Analysis by Leadership" (QMS P 06-12) describing the implementation of system analysis by the SSC's top management for the purpose to provide continuous improvement and efficiency of QMS, and totally 6 procedures had been published in 2010, the revised version is explained in "Quality Management System, Collection of Documents" 2013.

For the purpose to provide and improve process planning, activity and control all procedures are successfully applied in the structural divisions of the SSC. Until the end of 2014 all procedures will be more improved according to the requirements of ISO 9001:2008 international standard and will be reflected in the third edition of the "Quality Management System, Collection of Documents".

"Control of Documents" prosedure

The structure of "Control of Documents" procedure includes information on below mentioned 16 items together with comprehensive explanations. The structure is as follows:

- Application area;
- Normative basis;
- Terms and definitions;
- Conditional symbols and abbreviations;
- General provisions;
- Content of documents;
- Distribution of responsibilities for keeping documentation;
- Control of external documents;
- Control of internal documents;
- QMS documents of the SSC;
- Expert evaluation of the documents;
- Cancellation;
- Rules on making amendments;
- Responsibility;
- Privacy;
- Final provisions.

In this procedure the standard example of each form is presented and its application is implemented compulsory. Application of the standard documentation forms serves for systematic organization of work, application of the standards and quality assessment of work during the control.

Records

Records in the SSC are made based on ISO 9001:2008 standard. The list of compulsory records had been developed and each item in the list had been coded according to the standard in order to increase ability to adopt, clarity and transparency principles, access

to documents, professional capacity and responsibility of employees. The codes show what the standards requirements this written note has.

Any records should reflect the information enabling to define its object, person responsible for keeping and the date of keeping. Keeping of records is specified by the corresponding procedures, guidelines, rules, regulation, internal normative documentations and QMS internal documents. According to the standard requirements to make amendments to the records is prohibited. If some technical and grammatical errors need to be corrected it is necessary to strike through errors and indicate the correct information nearby (or on the top) and then it should be signed by responsible person.

Application of GSBPM

Version I of "Generic Statistical Business Process Model" had been approved by the Decree of the SSC dated 04.09.2012, N_{\odot} 66/07. Stages considered in GSBPM specify the general scope of production, e.i. its stages and sub-processes may not be the same for all products. Moreover, the stages specific for any product may not be appropriate for other product or activity. Here the focal point is to organize activity on the adopted model. In 2013 GSBPM had been improved taking into account its more detailed processes, national version II of GSBPM had been developed and 158 sub-processes were added (definition of the requirements – 28, designing – 25, creation of production system – 14, data collection process – 17, the process of data processing – 16, dissemination process – 17, analysis process – 19, archiving process – 14, assessment process – 8 sub-processes) and approved by the decree of the SSC dated 12 April 2013, N_{\odot} 30/07.

Process maps

For the purpose to increase effectiveness of the SSC's activity the standards and maps of processes had been developed on subject and non-subject matter units of the Administration and confirmed by the decrees dated 05 and 30 December 2012. General list of 23 process maps is presented below:

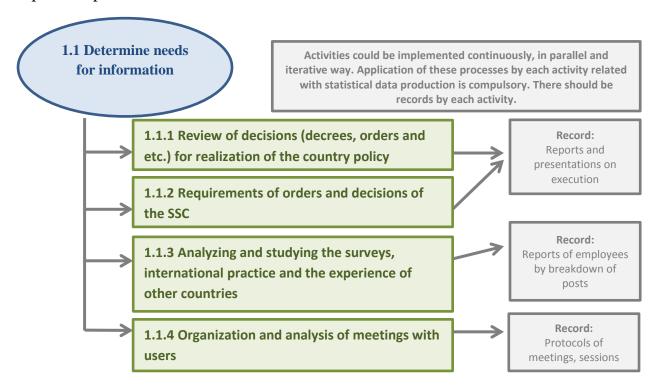
- Processes and maps of subject matter units of the Administration;
- Processes and maps of non-subject matter units of the Administration;
- Standards and maps of Quality Management System processes;
- Standards and processes of planning of statistical activity;
- Standards and maps of the processes of keeping registries;
- Standards and maps of the processes of maintaining classifications;
- Standards and maps of the processes of conduction of sample statistical observations;
- Standards and maps of the processes of management of statistical observation programs;
- Standards and maps of the processes of statistical production;
- Standards and maps of the processes of management of clerical works;
- Standards and maps of the processes of management of statistical information system.

According to the improved (second) version of "Generic Statistical Business Process Model" the standards and maps of management of statistical processes by subject matter units of the Administration had been enhanced and the standards and maps of management of processes by non-subject matter units had been improved taking into account activity features.

As an example of standards and maps of the processes developed by subject matter units the stage "Specify Needs" of the "Standards and maps of management of statistical processes on national accounts and macroeconomic indicators statistics" could be shown. 6 sub-processes provided by the stage "Definition of needs" are:

- 1.1. Determine needs for information;
- 1.2. Consult and confirm needs:
- 1.3. Establish output objectives;
- 1.4. Identify concepts;
- 1.5. Check data availability;
- 1.6. Prepare business case.

Map of the process of "Determine needs for information"



Sub-processes on 1.2 "Consult and confirm needs" of the stage "Determine needs for information" are specified as follows:

- 1.2.1. Consultation with stakeholders:
- 1.2.2. Investigation of data availability;
- 1.2.3. Presentation of issue to Methodological Council;
- 1.2.4. Receiving of official agreement;
- 1.2.5. Approval of the need.

For sub-processes 1.2.1 and 1.2.2 as in 1.1.3 the record "reports of employees by breakdown of posts" is required, for sub-processes 1.2.3, 1.2.4 and 1.2.5 it is consequently required the records "protocol or decision of methodological council", "official letters", "decrees and decisions".

Sometimes records are not required for definite sub-processes. As an example it could be shown the sub-process 1.3 "Establish output objectives".

"1.3 Establish output objectives. This sub-process defines output statistical product required for provision of needs specified in the sub-process 1.2 (Consult and confirm needs) of users. It reflects agreement of the specified output data with users and assessment of their quality. Records for activity are not necessary".

As regard to other sub-processes it should be noted that description for 1.4 "Identify concepts", 1.5 "Check data availability", 1.6 "Prepare business case" has been also prepared and the records have been specified. Separate charts for each of them have been prepared and are accessible for employees.

Processes and maps of local statistical bodies

For the purpose to establish QMS in statistical departments of Baku, Ganja, Sumgayit and Mingechevir cities, Barda and Lenkoran regions the SSC had developed Action Plan for 2014-2015 and started to implement actions at the level of 6 regions according to the plan. Standards and maps of management of statistical processes had been developed for each selected regional (city) statistical department; charts had been prepared and approved.

Standards and maps of management of statistical processes of statistical department of Baku city consist of the following 8 sub-processes:

- 1.1. Standardization of activities in the frame of QMS and formation of single mechanism;
- 1.2. Organization of statistical works and presentation of data to the SSC;
- 1.3. Realization of the work of statistical data collection;
- 1.4. Analysis of statistical data;
- 1.5. Organization of works on personnel;
- 1.6. Organization of clerical works;
- 1.7. Organization of accounting and financial-economic works;
- 1.8. Conduction of works on archiving.

The following sub-processes had been specified for the process 1.1. (Standardization of activities in the frame of QMS and formation of single mechanism):

- 1.1.1. Announcement of policy and goals;
- 1.1.2. Preparation of key documents on quality and procedures;
- 1.1.3. Definition of responsibilities and duties;
- 1.1.4. Planning of works;

- 1.1.5. Creation of infrastructure and production environment;
- 1.1.6. Carrying out of internal audits;
- 1.1.7. Analysis by the leadership of local statistical body;
- 1.1.8. Management of nonconforming products;
- 1.1.9. Taking of corrective and preventive measures;
- 1.1.10. Realization of activities on regular improvement.

In this process 10 sub-processes had been prepared, the subsequence was followed and the information about records were provided. It is necessary to note that sub-processes implemented in this process are only activities carried out in accordance with QMS requirements and cover the regional level.

The process 1.2 "Organization of statistical works and presentation of reports to the SSC" considers general compilation of works in the context of Official Statistics at the regional level. The following 8 sub-processes are covered here:

- 1.2.1. Familiarization of specialists with orders, decisions of the Board and other official documents of the SSC in a certain order;
- 1.2.2. Actualization of register of statistical record units;
- 1.2.3. Conclusion of contracts with statistical record units for presentation of data in edocument form to state statistical bodies;
- 1.2.4. Filling in of datasheet of region main social-economic indicators;
- 1.2.5. Preparation and publication of analytical report on social-economic situation of the region;
- 1.2.6. Publication of statistical yearbooks, bulletins, press-releases and other materials based on the collected data;
- 1.2.7. Provision of the SSC and local executive authorities with statistical materials characterizing social-economic and demographic situation of the region;
- 1.2.8. Presentation of report on implemented works to the SSC based on the prepared plan of actions.

This process begins with record "familiarization sheet" of employees with every document and ends with report-oriented records. Description of the processes in a chart creates a habit for each employee to follow working sequence, and the stage explanation of the processes could avoid organization of the special training to be considered for this activity.

Application of GSBPM in management of statistical processes on conduction of agricultural census

It should be noted that conduction of "Agricultural census" in the country is planned for 2015. Example of application of GSBPM in management of statistical processes on conduction of agricultural census is as follows:

1.2	Consult and confirm needs	Keeping discussions with MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU on conduction of agricultural census, getting agreement and approval	Proposals from MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, protocols of meetings, written agreements	MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, SSC	Definition of information and needs of agricultural census
1.2.1	Consultation with stakeholders	Organization of written and oral discussions with stakeholders presenting questionnaires	Protocols of meetings and written agreements	SSC	Discussion and analysis of proposals
1.2.2	Investigation of data availability	Investigation of data availability	Work distribution of agriculture and ecology statistics department	SSC	Update
1.2.3	Presentation of issue to research Methodologi cal Council	Presentation of draft questionnaires' methodological materials for discussion in research methodological council	Agreement letters with MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU	MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, SSC	Protocol or decision of research methodological council
1.2.4	Receiving of official agreement	Approval of the adopted versions of questionnaires' methodological materials in research methodological council	Agreement of the version adopted by research methodological council with MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU	MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, SSC	Agreement letters received from MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, SSC
1.2.5	Approval of need	Presentation of questionnaires/methodological materials for approval	Agreement letters of MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU and opinion of research methodological council	MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU, SSC	Decrees and decisions of the SSC
1.2.5	Approval of need	Posting of questionnaires on the state register of legal acts	Agreement letters of MEI, MA, MF, ML, MENR, SCLC, ANAS, ASUE, AAU and opinion of research methodological council	ML, SSC	Decrees and decisions of the SSC

In a full version all processes of the census by 9 stages have been written by GSBPM; name of the process, name of activity, introduction material, provision and the result have been written according to the standard requirement.