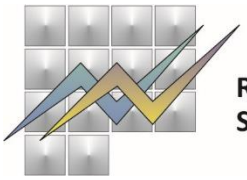


Republic of North Macedonia
State Statistical Office

MAKSTAT

Statistical Business Process Model of the State Statistical Office

SBPM

(Version 2.0, March 2019)

Contents

Preface

The strategic objective of the State Statistical Office is the production of high-quality statistical data and efficiency of work processes. In order to achieve this objective, it is necessary to standardise activities and to unify work processes as much as possible. The adoption of the Generic Statistical Business Process Model, originally developed by UNECE, will contribute towards standardisation and unification of work processes.
The State Statistical Office, based on the Generic Statistical Business Process Model version 4.0, prepared the first national version of the Statistical Business Process Model in 2010.
Following the changes in the Generic Statistical Business Process Model, as well as the applicability of the national model, it was necessary to develop a updated Statistical Business Process Model in line with these changes and adapted to the current situation.
The second version of the Model was developed by the Working Group for the Pilot Project on Quality Management, under the guidance of Mira Todorova MSc., Project Leader, and it was prepared as part of the IPA 2015 MBP Programme of the European Commission.

Director
Apostol Simovski

Introduction

The main objective of the Statistical Business Process Model of the State Statistical Office (SBPM) is to achieve greater transparency of the work processes by describing them in a harmonised way.
The Generic Statistical Business Process Model (GSBPM) is a reference model that describes and defines a set of business processes needed to produce statistical data. It provides a standard framework and harmonised terminology, which helps statistical organisations to modernise production processes, as well as to share models and components.

The State Statistical Office prepared the second version of the Statistical Business Process Model by following the structure of GSBPM version 5.1.

SBPM should be applied and interpreted flexibly. It is not a rigid framework in which all steps must be followed in strict order; instead it identifies possible steps in the statistical business process and the inter-dependence between them.

SBPM has three levels:

- Level 0, statistical business process,
- Level 1, phases of the statistical business process,
- Level 2, sub-processes within each phase.

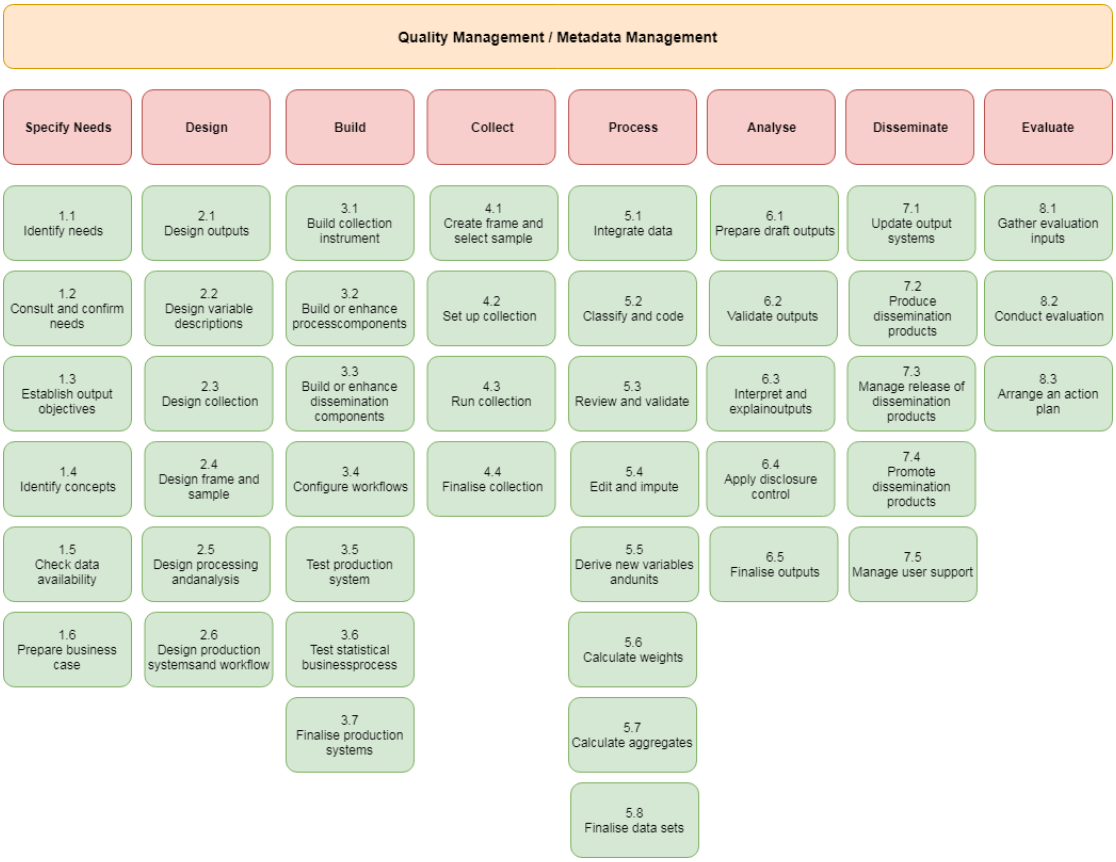
The model is organised in 8 phases and 44 sub-processes. The first three phases refer to the design of the statistical operation, the next four refer to its implementation, and the last one concerns the evaluation of the quality of the operation.
The biggest change in this version of SBPM in relation to the previous version of SBPM is the inclusion of a new Phase 8: Evaluation. Also, the terminology in the description of the sub-processes has been changed, and some sub-processes have been included or excluded in order to adjust the model to the current situation in the institution.

With the help of the Statistical Business Process Model, users and providers of statistical data will gain an insight into the production of statistics.

More information about the Generic Statistical Business Process Model is available on the official UNECE website: https://statswiki.unece.org/display/GSBPM.

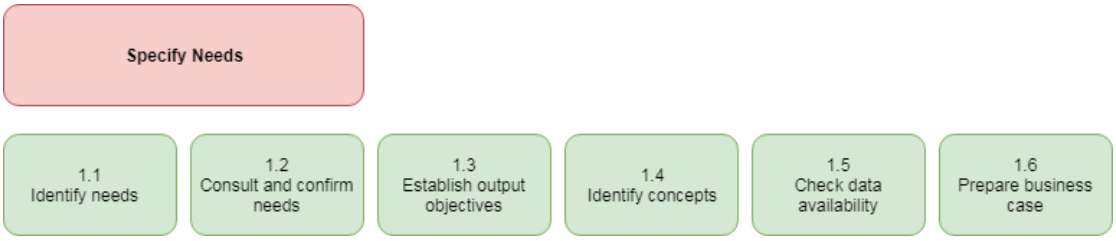
I. Model

Levels 1 and 2 of the Statistical Business Process Model of the State Statistical Office



II. Descriptions of phases and sub-process

1. Phase: Specify Needs



The main objective of this phase is to gather and arrange systematically information about the statistical needs of both external users (e.g. national and international data requests, fulfilment of obligations arising from national and European legislation) and internal users (for producing statistics) to prepare a business case in order to determine their relevance and to draw up plans to meet these needs.

The process of analysing the data needs of users is the basis for subsequent decisions on planning the survey.

1.1. Identify needs

This sub-process involves gathering information to identify the need for new statistics of internal and external users in order to determine which statistical data meet the statistical needs.

The needs arise from: changes in national and EU legislation, needs of users for performing various analyses, as well as the needs of the public for general information. Also, statistics in one area are used as inputs for another statistical area (for example, national accounts).

Demands for new statistics arising from international requirements and recommendations (primarily Eurostat) are included as a new survey in the Programme of Statistical Surveys or as an ad hoc survey that meets the data needs.

All data requests are collected and arranged in a database (in LOTUS or other format) and they are periodically reviewed by the management of the institution.

1.2. Consult and confirm needs

The purpose of this sub-process is to harmonise the needs of all stakeholders and to determine the relevance of the needs. This stage identifies which data requests are a priority, and which can be dismissed.

In the State Statistical Office, the broadest consultation process is carried out during the preparation of the multi-annual Programme of Statistical Surveys. These consultations can also be held during the preparation of the Annual Programme of Statistical Surveys, in order to ensure that user needs are aken into account in the statistical production. User needs for new statistical products should be carefully examined to eliminate all potential misunderstandings about the final product in the early stages (e.g. level of presentation in terms of statistical disclosure control and quality measures).

The result of user consultation and further analysis should be documented as a confirmed need for information.

1.3. Establish output objectives

This sub-process identifies the statistical outputs that are needed to meet the user needs identified in sub-process 1.2 (Consult and confirm needs). For example: what is the purpose of the new statistics, who are the users of the product (output data), how will users have access to statistical information, the degree of processing (aggregated or microdata).

Summing up relevant existing information about the proposed products will provide a clear definition of the output variables, as well as their disaggregation. For example, in sample-based surveys, to know the level at which representativeness is achieved.

The legal frameworks (e.g. regarding confidentiality) and the available resources are likely to be constraints in establishing the output objectives.

1.4. Identify concepts

This sub-process defines the required concepts that need to be measured by the business process from the point of view of the user.

User needs are not always aligned with statistical standards or it is impossible to measure them directly. The difference should be explained: closest approximation, what can be measured and how it can be used as a substitute for what is requested, as well as the impact on the quality of the requested information. Potential observation units, as well as the variables to be collected, can be identified based on what can be measured realistically.

The purpose of this sub-process is not to align the identified concepts with those used in practice (this is done in sub-process 2.2).

1.5. Check data availability

This sub-process checks whether existing data sources can meet user requirements, in accordance with the conditions they require. All data sources (e.g. data from statistical surveys, administrative registers) that can be used to produce statistics in accordance with user requirements should be determined during this sub-process.

The analysis of the gap between the available data and the necessary statistical information will be the basis for justifying the use of all sources, which will ensure that user needs are met.

Also, a plan should be prepared on how to fill in data gaps, including assessing the possibility of using potential administrative or other non-statistical data sources for statistical purposes. This sub-process also includes an assessment of the legal framework for using administrative and other data sources.

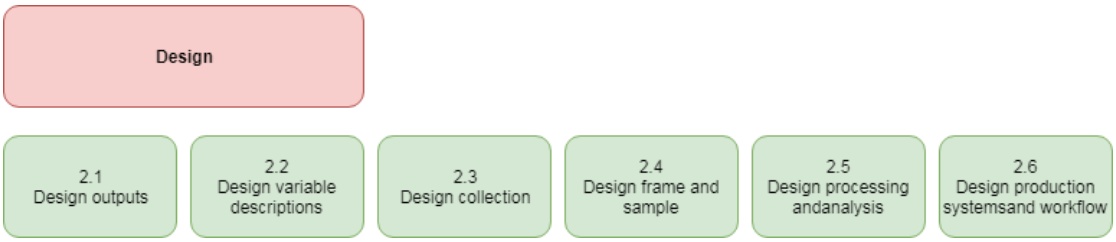
1.6. Prepare business case

Within this sub-process, based on user needs and other knowledge, a proposal should be prepared for meeting user requirements, with several solutions possible: changing an existing survey, introducing a new survey or using administrative data sources. The recommendation should facilitate the process of survey planning. If the recommendations for introducing a new survey are accepted, a procedure should be initiated for amending the Five-Year Programme of Statistical Surveys accordingly.

All information and descriptions given in the "Specify needs" phase should be recorded in a document describing the needs for introducing new/changed statistical surveys, financial implications, human resource implications, and the necessary changes in legislation.

The prepared document should be evaluated by the management of the institution and, if accepted, appropriate changes should be made to the Programme of Statistical Surveys.

2. Phase: Design



This phase designs the process of producing statistical data. The theoretical preparation of the process is done in the first phase – Specify needs. When introducing a new survey and during its first iteration, this phase refers to the design of the entire process of data production, while for each change in the survey this phase refers to:

- analysis of data sources,
- defining concepts and nomenclatures to be used in the survey,
- defining sampling frame,
- preparing for sample design,
- design of methodologies for collecting, processing and disseminating data,
- design of business processes.

Appropriate planning and preparation of the survey is crucial for its successful implementation.

The basic elements that define a statistical survey are incorporated in the Five-Year and in the Annual Programme of Statistical Surveys. Although the initial phases of the survey planning process are almost identical for all surveys, depending on the data collection method, there are differences in the survey design.

2.1. Design outputs

This sub-process involves the comprehensive design of statistical outputs and defining the activities for their development. If the output data include individual data, then disclosure control measures should be defined, as well. Also resulting from this sub-process is the preparation of output design used in the "Dissemination" phase (e.g. table design, dissemination database design, etc.).

2.2. Design variable descriptions

This sub-process defines the statistical variables to be collected with the collection instrument, as well as any other variables that will be derived from them in sub-process 5.5 (Derive new variables and units) and all statistical classifications that will be used. It is expected that existing national and international standards will be followed whenever possible. This sub-process may need to run in parallel with sub-process 2.3 (Design collection), because the definition of the variables to be collected and the choice of the collection instrument may be inter-dependent to some extent. The preparation of metadata descriptions of collected and derived variables and classifications is a necessary precondition for subsequent phases.

2.3. Design collection

This sub-process defines the content and determines the most appropriate data collection methods and instruments. The actual activities in this sub-process will vary depending on the type of necessary data collection instruments, such as: computer-assisted interviewing, paper questionnaires, administrative data sources, and data integration techniques. This sub-process includes the design of: collection instruments, questions and response templates.

The questionnaire is still the main instrument for collecting data in the State Statistical Office. It translates survey variables into formulations that are understandable for the group of respondents - households, enterprises, state authorities - and that can be covered by the selected data collection instrument. This sub-process involves formulating questions for collecting data on the required variables, as well as preparing a draft questionnaire.

It also includes the design of formal agreements related to data supply, such as memoranda of understanding and confirmation of the legal basis for data collection.

2.4. Design frame and sample

This sub-process only applies to processes that involve data collection based on a sample. It identifies the target population and defines and designs a sampling frame. This sub-process also determines the source to be used for the sampling frame: administrative and statistical registers, censuses and information from other surveys. It describes how these sources can be combined, if necessary. An analysis needs to be made as to whether the frame covers the target population.

This sub-process ends with the creation of a sample design plan.

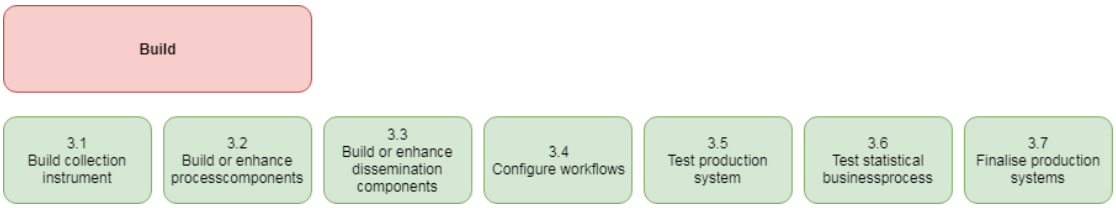
2.5. Design processing and analysis

The purpose of this sub-process is to design the statistical processing methodology to be applied in the "Process" and "Analyse" phases. More specifically, it defines methods of coding, data entry, validation, editing, imputation, estimation and protection against disclosure.

2.6. Design production systems and workflow

This sub-process covers the description of the entire data production process, the manner of quality assurance and the order of all the steps from data collection to archiving. During the process design for a particular survey, it is necessary to examine the relationship between repeating sub-processes and determine the decision makers.
Within this sub-process, it is necessary to establish employee duties and responsibilities, specify which employees have access to the system and, if possible, give an estimate of the time and costs of their engagement.
The "Design" phase ends with the production of a document that is the basis for building an entire production system. This document may include a schematic (diagram) of the flow of data from statistical surveys, as well as a definition of the structure of the data files used in the processing.

3. Phase: Build



The basic function of the "Build" phase is to prepare data collection instruments, set up the configuration and test IT instruments, check their compatibility and put them into operation. This phase involves conducting a pilot survey and preparing the entire data collection process in the regular survey.

By implementing the "Build" phase, the statistical survey is ready to be carried out.

In regular statistical surveys, this phase usually occurs for the first iteration, and after a revision or change in methodology, rather for each iteration.

3.1. Build collection instrument

The purpose of this sub-process is to select, describe, develop and test data collection instruments.

This sub-process ensures that the functional and organisational model of the workflow specified in sub-process 2.6 (Design production systems and workflow) are functional in practice. Some of the activities in this process are:

- configuration and organisation of data collection systems (description of procedures for carrying out the collection)
- protection of data confidentiality (description of instructions, defining procedures for interviewers and other staff in charge of data collection, in order to ensure the security of the data to be collected).

The possibility of direct connection of the collection instruments to the statistical metadata system should be considered in this sub-process.

3.2. Build or enhance process components

The purpose of this sub-process is to complete the activities defined in the second phase "Design" and describe the activities to build new and enhance existing components and services needed for the "Process" and "Analyse" phases. The databases are created here, and the implementation of sub-processes with IT support is defined. Also, this sub-process includes the design of instruments to produce dissemination products. At the end of this sub-process, it is determined which IT instrument will be used in the production process.
Data collection instruments must be based on a sound methodology developed in the "Design" phase and created in a way that achieves the best balance between maximising data quality and controlling measurement errors. This sub-process includes the following activities:

- creation of data collection instruments (questionnaire or data extraction routine),
- opinions and observations on the data collection from related subject areas,
- verification of the data collection instruments by the competent authorities,

- production of application components and
- testing of each individual component.

3.3. Build or enhance dissemination components

This sub-process describes the activities to build new and enhance existing components needed for the dissemination of statistical data as designed in sub-process 2.1 (Design outputs). All types of dissemination components are included, from those used to produce traditional paper publications to those providing web services, open data outputs or access to microdata.

3.4. Configure workflows

This sub-process configures the workflow, systems and transformations used within statistical business processes, from data collection to dissemination. It ensures that the workflow specified in sub-process 2.6 (Design production systems and workflow) works in practice.

The complete system should be tested (including each system component) from a methodological and ICT point of view: programmes, documentation and workflow. It is preferable to perform practical testing whenever possible, and especially when it comes to large-scale surveys. Testing of the production system is divided into integration testing and acceptability testing. The purpose of integration testing is to check whether the different subsystems work well together, and this must be carried out in conditions that are close to the final operational environment. This test is usually conducted by IT staff. Acceptability testing ensures that the system complies with the initial requirements (sub-process 2.5: Design processing and analysis), and this must always be carried out by subject matter experts. The results of the testing of the production system must be documented and taken into account when designing the final system.

3.5. Test production system

This sub-process concerns the testing of assembled and configured services and related workflows. This includes technical testing, the inclusion of new programmes and routines, as well as confirmation that the existing routines from other statistical business processes are suitable for use in this case. While part of this activity related to the testing of individual components and services can be linked with sub-process 3.2 (Build or enhance process components), this sub-process also involves testing of interactions between assembled and configured services and ensuring that the production solution works as a coherent set of processes, information and services.

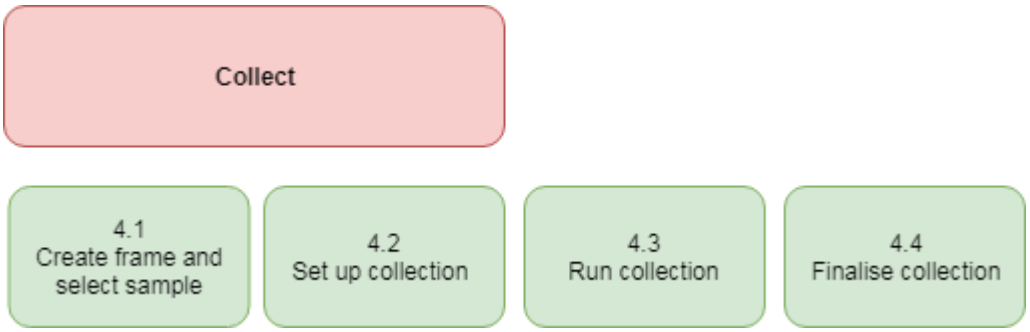
3.6. Test statistical business process

This sub-process describes the activities to manage a field test or pilot of the statistical business process. Typically, this involves small-scale data collection to test the collection instruments, followed by processing and analysis of the collected data, to ensure that the statistical business process is carried out as expected. After the pilot, it may be necessary to return to a previous step and to adjust the instruments, systems or components. For a major statistical business process, e.g. a population census, there may be several iterations until the process starts to work as expected.

3.7. Finalise production systems

This sub-process includes activities for electronic storage of collected data in the form in which they were collected. In fact, this sub-process shows how the data collection process ends and preparations for data processing are made.

4. Phase: Collect



This phase involves the collection of statistical information (data and metadata). Data can be collected in a variety of ways, such as directly gathering data from reporting units, using combined data collection methods (e.g. administrative and other non-statistical registers and databases), as well as collecting data via electronic media (e.g. online data collection).

4.1. Create frame and select sample

This sub-process establishes the frame and selects the sample, as specified in sub-process 2.4 (Design frame and sample). It also includes the coordination of samples in the same statistical process and between different processes. Quality assurance of the frame and the selected sample is also part of this sub-process.

4.2. Set up collection

The purpose of this sub-process is to provide human and IT resources for designing the survey, to inform the reporting units and holders of administrative data sources about the obligation to provide statistical data.

This sub-process includes:

- preparing a plan and data collection instruments (printing questionnaires, pre-filling them with existing data, loading questionnaires and data onto computers of interviewers, etc.)
- training data collection staff
- providing resources for data collection, e.g. laptops
- configuring collection systems to request and receive data
- ensuring the security of data to be collected
- managing relations with data providers and holders of data sets
- contacting respondents before the start of data collection - sending notifications to potential respondents that they have been selected to participate in the survey and giving a brief description of the survey itself.

For non-survey sources, this sub-process will include ensuring that the necessary processes, systems and confidentiality procedures are in place to receive or extract the necessary information from the source.

4.3. Run collection

The purpose of this sub-process is to collect raw microdata or aggregates using a variety of instruments. Data collection methods and instruments have been established during the survey design. Within this sub-process, relevant information is collected on how the data collection process is conducted (e.g. when and how data providers were contacted and whether they responded).

For administrative and other non-statistical sources, this process refers to whether the data holder is contacted to send the information. When the collection meets the targets, it is closed and a collection report is produced. Basic validation of the structure and integrity of the information received may be done within this sub-process, e.g. checking that the files are in the correct format and contain the expected fields. All validation of the content takes place in the "Process" phase.

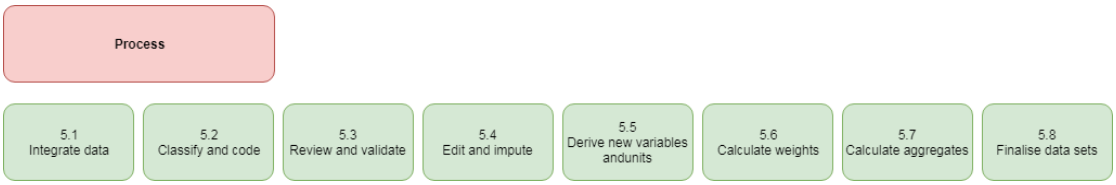
4.4. Finalise collection

This sub-process involves loading the collected data and metadata into a suitable electronic environment for further processing. It may include manual or automatic data take-on, for example, with the help of employees or converting the formats of files received from other organisations.

In cases where there is a physical collection instrument, such as a paper questionnaire, which is not required for further processing, this sub-process manages the archiving of that material.

The data collection phase is finalised by manual preparation for loading the collected data and metadata into a suitable electronic environment for further processing in phase 5 (Process).

5. Phase: Process



Data processing covers all procedures by which the data collected in a particular statistical survey are processed using statistical methods and are edited in a form suitable for analysis and publication. Sub-processes in this phase may be repeated several times if necessary, and in regular statistical surveys this phase occurs in each iteration.

Sub-processes in this phase can apply to data from both statistical and non-statistical sources (with the possible exception of sub-process 5.6 (Calculate weights), which relates primarily to survey data).

The "Process" and "Analyse" phases can be both iterative and parallel. The analysis can reveal a more comprehensive understanding of the data, which might determine whether additional processing is needed. Activities in the "Process" and "Analyse" phases may begin before the "Collect" phase is completed. This enables the calculation of provisional data results where timeliness is crucial for users.

5.1. Integrate data

This sub-process covers the integration of data files from one or more sources. Input data can be from a mixture of external or internal data sources, as well as a variety of collection methods, including extracts of administrative data.

Here, integration is done, linking data from different sources when they relate to the same unit. Also, priority is given when two or more sources contain data for the same variable (with potentially different values). In case of overlapping data sources, which need to be integrated, data integration is done through defined identifiers.

Integration also takes into account data protection issues. If there are individual data, data anonymisation may also take place here.

5.2. Classify and code

This sub-process concerns the collection of data via paper forms and includes: classifying and coding input data according to a predetermined classification scheme. It consists of two stages:

- Determining the status of key variables by inserting codes that clearly identify missing data in cases where no input is required (e.g. skipping according to a skipping scheme) and
- Classifying/coding text responses in cases where they may be assigned standardised codes, thus facilitating their analysis. This step assigns a unique code to the statistical unit. When using paper questionnaires, this process can start before or in parallel with data loading. Automatic coding is applied in eStat, where software is used for data coding based on code lists.

5.3. Review and validate

This sub-process examines the data to identify potential errors, problems and discrepancies. Validation often refers to checking input data. Reviewing and validation are performed either manually or automatically and apply to all data regardless of the data source used. This sub-process detects actual and potential errors.

The principle that has proven to be suitable and is applied here is that all checks (which may be based on formal provisions, logical conclusions or experience and are relevant to the results) are aimed at ensuring the best quality of data.

In this sub-process, all logical checks of microdata are performed to detect errors and discrepancies. These include:

- input data validation
- summary control of main variables, overview of errors and editing, and
- exception handling.

The process is iterative, where validation is carried out based on predefined edit rules, usually in a set order. This process should be automated as much as possible. Routines are run and evaluated. Uncertain values can be corrected manually or automatically. This sub-process can apply to data both from surveys and from administrative sources, before and after integration. Extreme values and outliers are detected by means of statistical control of groups of units. Critical values are the values for the unit that have great significance, and therefore greatly affect the results. Non-critical values are processed automatically, and the critical ones manually, if possible. Macro-level control (statistical control) can detect all unusual groups of units. In that case, the micro-level control should be adjusted/extended and implemented as a result of new facts revealed at the macro level.

Appropriate data editing must be made based on the available results to reduce or eliminate errors; for quality reports there should be an indicator at least for key variables.

5.4. Edit and impute

The purpose of this sub-process is to fill in empty cells with data based on available cells that have been already filled. Unit and item imputation are carried out within this sub-process.

Imputation can be made by changing some of the responses or by assigning values where they are missing in the register that is edited to ensure that the estimates are of high quality and that the register is internally consistent and reliable. Specific steps include:

- determining registers and fields for imputation (identification of potential errors and gaps)
- carrying out imputation in accordance with established rules
- performing macro editing.

Certain parts of sub-process 5.4 may begin before sub-process 5.6 (Calculate weights), but can not end before sub-process 5.3, because imputation may in principle require all available data.

5.5. Derive new variables and units

The purpose of this sub-process is to produce data for variables and statistical units that are not directly available when source data are collected (e.g. derived indicators, indices, etc.). The production of indices in this sub-process is done from collected data, and the production of new statistical units is done by aggregating the relevant units or by estimation.

New units may be derived by aggregating or splitting data for collection units, or by other estimation methods.

5.6. Calculate weights

This sub-process creates weights for statistical units, taking into account: non-response, outlier treatment, calibration, and treatment of variations over the years. Weights are used to make estimates that refer to the entire population.

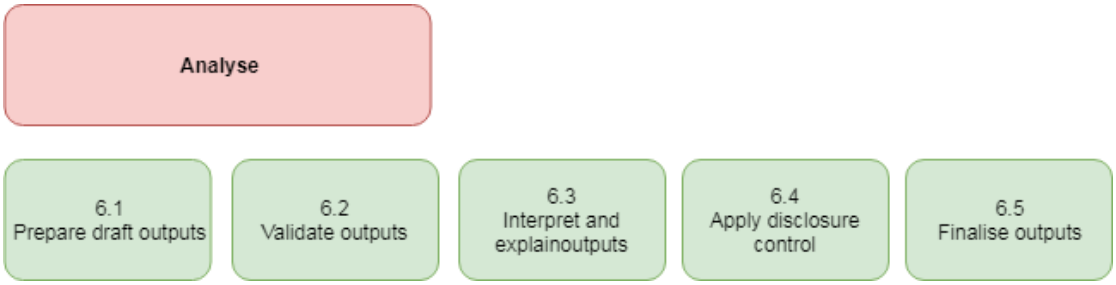
5.7. Calculate aggregates

The purpose of this sub-process is to create aggregate data based on micro (source) data, to produce estimates and to calculate their errors. Aggregation is performed according to grouping criteria or according to the time dimension. Estimation errors as well as sampling errors are calculated in this sub-process.

5.8. Finalise data sets

This sub-process brings together the processed data in a data file (usually of macro-data), which is used as an input to the "Analyse" phase. This completes the processing of data.

6. Phase: Analyse



The purpose of this phase is to prepare dissemination products, i.e. outputs as defined in sub-process 2.1, based on the processed data.

The analysis of the data should confirm the relevance of these data and identify weaknesses, which must be eliminated to improve the quality of the data. If the analysis shows systemic errors, this information is used to improve processes or to change methodologies.

The "Analyse" phase contains all activities that facilitate the understanding of statistics by internal and external users and it includes:

- preparing a draft output from the statistical production process,
- conducting validation at the macro level according to a defined procedure,

- seasonal adjustment of data, if seasonally adjusted data are published,
- interpretation, textual analysis and explanations included in dissemination products,
- applying disclosure control measures in dissemination products
- preparing appropriate metadata for the data that are disseminated.

For regular statistical surveys, this phase occurs in each iteration. The "Analyse" phase and sub-processes are generic for all statistical results, regardless of how the data were obtained.

6.1. Prepare draft outputs

This sub-process concerns the creation of draft outputs from the available data, as defined in sub-process 2.1. This includes the preparation of supporting information (such as indices, quality indicators, etc.) needed to evaluate the raw output. This sub-process includes filling data in dissemination databases. The sub-process ends with the production of draft outputs and related supporting information.

6.2. Validate outputs

The purpose of this sub-process is to determine whether the quality of the outputs produced is in accordance with the general quality framework and with the expectations.

Validation activities can include:

• checking that the population coverage and response rates are as required;
• comparing statistics with previous cycles (if applicable);
• checking that associated metadata are in line with expectations;
• comparing the statistics against other relevant data (internal and external);
• investigating inconsistencies in the statistics;
• performing macro editing;
• validating the obtained statistics against expectations.

6.3. Interpret and explain outputs

This sub-process concerns the detailed interpretation of data by statisticians. Using their knowledge, they should interpret and explain the statistical data that are produced and carry out in-depth statistical analyses.

6.4. Apply disclosure control

The purpose of this sub-process is to apply statistical disclosure control and factual protection of produced statistical data according to the disclosure control methods (defined in sub-process 2.6), as well as to check the outputs, resulting from working with individual data in the "safe room". The process ends with an output, by applying disclosure control rules and verifying data to be used use for research purposes.

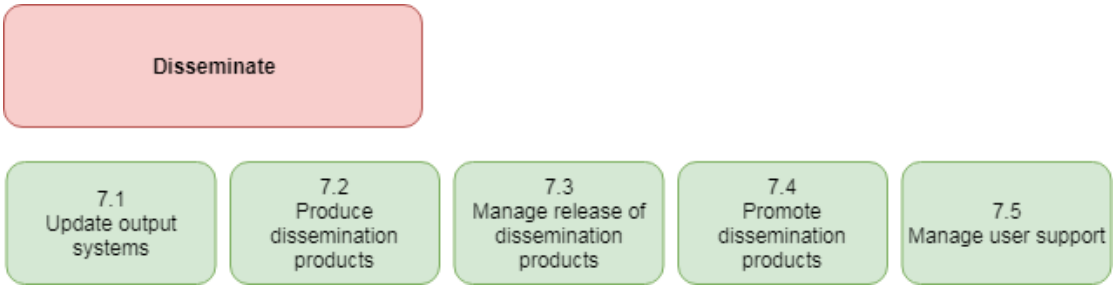
6.5. Finalise outputs

The purpose of this sub-process is to determine whether statistics and related metadata are in line with the objectives, quality requirements and whether they are ready for use.

It includes:

- completing consistency checks;
- determining the level of release and applying caveats;
- collating supporting information, including interpretation, commentary, technical notes, briefings, uncertainty measures, and other necessary metadata;
- producing supporting internal documents;
- pre-release discussion with internal subject matter experts;
- approving the statistics for release.

7. Phase: Disseminate



The release of statistical results (outputs) - via dissemination channels and communication tools in compliance with data protection rules - to users is covered by the dissemination of statistics.

Activities in this phase can occur in each iteration and refer to:

- editing dissemination products,
- filling the dissemination database - MakStat,
- managing national and international data requests and transmission of data to international organisations,
- activities related to the promotion of dissemination products,
- providing information to users about the services offered by the institution.

7.1. Update output systems

The purpose of this sub-process is to manage the update of data and metadata systems and to prepare them for dissemination. It includes the following activities:

- formatting data and metadata ready to be put into dissemination databases;
- loading data and metadata into output databases;
- ensuring that data are linked to relevant metadata.

Formatting, loading and linking metadata should take place in earlier phases, and this sub-process includes checking that all the necessary metadata are ready for dissemination. The data and metadata are loaded into the dissemination database (MakStat).

7.2. Produce dissemination products

This sub-process includes editing and preparing dissemination products for release (in the form as previously defined in sub-process 2.1), in accordance with the needs and expectations of users. Dissemination products are available in different types: printed and electronic publications (e.g. news releases, Statistical Yearbook, etc.), MakStat database, and tailored data sets. All these products are available in various forms: tables, charts, microdata sets for public use, etc.

7.3. Manage release of dissemination products

This purpose of this sub-process is to provide access to dissemination products and their actual publication. It ensures that all users have access to statistics at the same time and manages the Release Calendar. Activities for access to dissemination products based on signed agreements with certain user groups (e.g. access to microdata and data preparation according to user requirements) are also included here. Handling errors in dissemination products is also part of this sub-process.

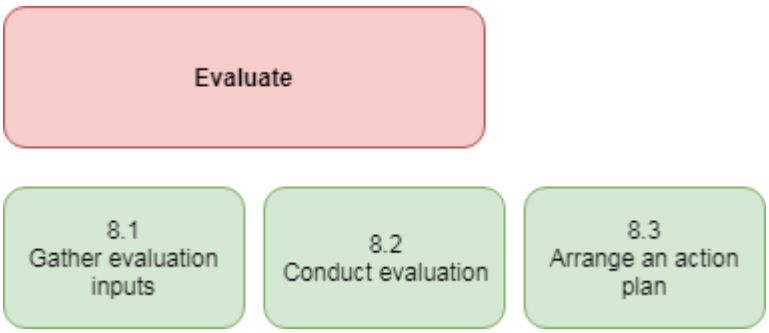
7.4. Promote dissemination products

This sub-process includes activities that promote the dissemination products before they are actually prepared. The Internet expansion offers a variety of opportunities for promotion of statistical products. The promotion of dissemination products should include cooperation with the mass media, as well as the use of own website and social media.

7.5. Manage user support

This sub-process concerns the recording of all user data requests and providing information whether these requirements are met on time and in line with user expectations. The application in LOTUS or another format managed by the Information Department is the basis for recording and analysing user data requests.

8. Phase: Evaluate



This is the final phase of the quality management process, but it relies on inputs gathered from the previous phases.

This phase evaluates the success of a specific instance of the statistical business process, using a range of quantitative and qualitative inputs. Possible improvements to the process are also identified with the preparation of an appropriate action plan.

Evaluation should help to decide whether the next iteration should start from the "Specify Needs" phase, or from a later phase (often the "Collect" phase).

8.1. Gather evaluation inputs

The material to be used as input for evaluation can be produced in any phase or sub-process. It may have many forms: user feedback, process metadata, system parameters and employee suggestions. This sub-process gathers all inputs and makes them available to the person or team performing the evaluation.

8.2. Conduct evaluation

This sub-process concerns the analysis of evaluation inputs and the preparation of an evaluation report. The evaluation report should include all quality issues and should make recommendations for changes. These recommendations may include changes to any phase or sub-process for future iterations of the process, or may suggest that the process is not repeated.

8.3. Arrange an action plan

With this sub-process, the decision-making body in the institution, based on the evaluation report, adopts an action plan. An integral part of the plan is defining a mechanism for monitoring the implementation of the recommendations from the evaluation.