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MONITORING AND REPORTING OF QUALITY IN STATISTICS

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Abstract. The present paper introduces the main principles of the quality management system of Statistics Lithuania, which is based on the ISO 9001 standard, and explains how the system promotes user confidence in statistics through the regular quality monitoring and reporting exercise. It is explained how the quality of statistics is measured and presented to the public; the usefulness of quality reports to the users, especially to researchers and academia, is discussed. Moreover, some results from the monitoring exercise and examples of quality reports are presented.

Keywords: ISO 9001, quality monitoring, quality reporting, user-oriented quality reports, ESS SIMS.

1. Introduction

Constantly growing users' requirements for the quality of statistics and their changing perception of quality statistics – when it has to be not only accurate, but also relevant, comparable and coherent, timely and punctual, accessible and clear – have encouraged statistical offices to pay more and more attention to the systematic quality management and implementation of quality assurance frameworks.

With this in view and striving to guarantee the continuous improvement of statistics quality, as well as better meeting user needs, Statistics Lithuania started its systematic quality work in 2002, shortly after the European Statistical Programme Committee had adopted the ESS Quality Declaration (renewed in 2016, see [1]), as a first step towards Total Quality Management. In 2005, when the European Statistics Code of Practice (hereafter Code) (see [2]) was issued, Statistics Lithuania thereby started implementation of its quality management system, conforming to the ISO 9001 (hereafter ISO) standard (see [3]). The system was awarded with certification in 2007. In 2016, it was re-certified for the fourth consecutive time according to the new ISO 9001:2015 version.

The essence of the ISO-based quality management is meeting customers' requirements and striving to exceed their expectations. Long-term success is achieved when organization attracts and retains the confidence of its customer, in our case, user of statistics. Regular monitoring and reporting of quality in statistics is not only a good tool for quality improvement, but it also helps to enhance transparency, comprehensibility and usability of official statistics, what leads to greater confidence in it. Users of statistics should be guaranteed that statistics are developed, produced and disseminated on the basis of uniform standards, harmonized methods and defined quality requirements. With a view to analyze statistical processes, to evaluate quality of statistics and effectively inform users about the outcomes, a system for monitoring and reporting of quality and performance indicators was introduced at Statistics Lithuania.

The set of regularly monitored indicators covers ESS quality indicators (see [4]) and other indicators related to different stages of statistical processes. The majority of these indicators are regularly published in the quality reports of Statistics Lithuania, which are based on the ESS Single Integrated Metadata Structure (SIMS) (see [5]). They provide information not only on statistics quality, but also describe statistical processing, presentation and other important aspects. Such kind of information is especially relevant to researchers and academia, as revealed by their opinion surveys, regularly performed by Statistics Lithuania. Clarity and accessibility of statistics are very important quality criteria when using statistical data for the

research, lectures, preparation of term papers and dissertations, as well as for the self-education. This shows the growing need for comprehensive and publicly available meta-information.

The paper introduces the main principles of the quality management system of Statistics Lithuania and explains how the system promotes user's confidence in statistics through the regular quality monitoring and reporting exercise. It explains how the quality of statistics is measured and presented to the public; also, usefulness of quality reports to the users, especially to researchers and academia, is discussed. Moreover, some results from the monitoring exercise and examples of quality reports are presented.

2. Quality framework of Statistics Lithuania

While acting in the ISO-based quality management system, Statistics Lithuania follows the UN Fundamental Principles of Official Statistics (see [7]), the Recommendation of the OECD Council on Good Statistical Practice (see [8]), the provisions of the ESS Quality Declaration and the Code.

The Code, being in line with the above mentioned documents, sets a common quality framework for the ESS in developing, producing and disseminating European statistics. 16 principles of the Code and related indicators of good practice cover the institutional environment, the statistical processes and the statistical outputs.

Statistics Lithuania is strongly committed to complying with the Code and is working towards its full implementation. There are a plenty of procedures, activities, methods and tools already in place to ensure close compliance of Statistics Lithuania with the Code's principles. The ISO-based quality management system also provides a good framework for the implementation of the Code: management rules, structure, processes and responsibilities are clearly defined and documented, performance results are planned and pursued purposefully, quality assessment and improvement methods and tools, such as audits, self-assessments, measurement of quality indicators, performance of user satisfaction surveys, etc., are implemented in a clear and systematic way. In fact, one of the reasons to use the ISO standard as a framework for quality management was the objective to facilitate the implementation of the Code, and ISO standard seemed to be the most appropriate for that.

The ISO-based quality management system of Statistics Lithuania comprises the organization of statistical surveys, production and dissemination of statistics and is based on the following quality management principles:

- Customer focus;
- Leadership;
- Engagement of people;
- Process approach;
- Improvement;
- Evidence-based decision-making;
- Relationship management.

The commitment to follow these principles with the aim to improve statistical outputs and processes on a continuous basis is reflected in the Quality Policy of Statistics Lithuania:

- to apply methods and procedures that meet European and international standards, guidelines and good practices;
- to react to changing user needs – speed up the production and publication of statistical information, taking into account its relevance;
- to continually improve statistical activity, increasing its efficiency;
- to strengthen cooperation with data providers, properly manage response burden;
- to ensure confidentiality and security of statistical data;

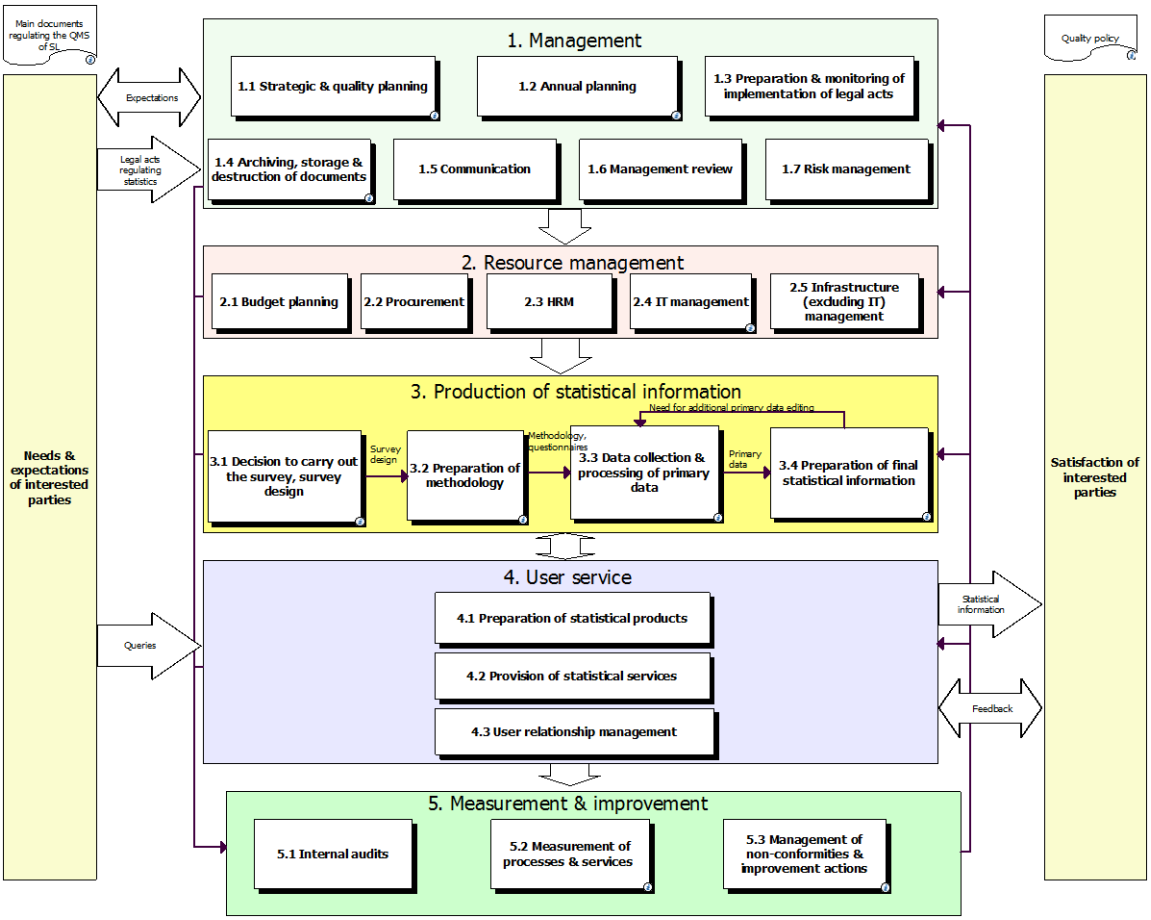
- to strengthen coordination of other institutions, managing official statistics in the country, and implement the principles of the Code;
- to continually improve the quality management system;
- to strengthen interinstitutional and international cooperation in statistical area, actively participate in statistical activities of the ESS and international organizations;
- to build a community of motivated and loyal professionals;
- to rationally use resources and increase social responsibility.

The Quality Policy is a key quality management document that ensures continuous improvement of the institution's activity and provides a framework for setting quality objectives. It fully supports the strategic directions of Statistics Lithuania.

The ISO standard also highly promotes the adoption of process approach when developing, implementing and improving the effectiveness of quality management, to enhance users' satisfaction by meeting their requirements. The advantage of such approach is the ongoing control that is provided over the linkage between the individual processes and within the system of processes, as well as over their combination and interaction. The ability to provide quality statistics highly depends on the quality of the processes, i.e. on the ability to identify, specify, describe, perform and improve processes, necessary to achieve desired results in accordance with the quality policy and strategy of an institution.

The core processes of production and dissemination of statistics are supported by the appropriate performance and resource management at Statistics Lithuania (See Figure 1). Process managers ensure effective operation of the processes they are responsible for.

Figure 1. Processes of Statistics Lithuania

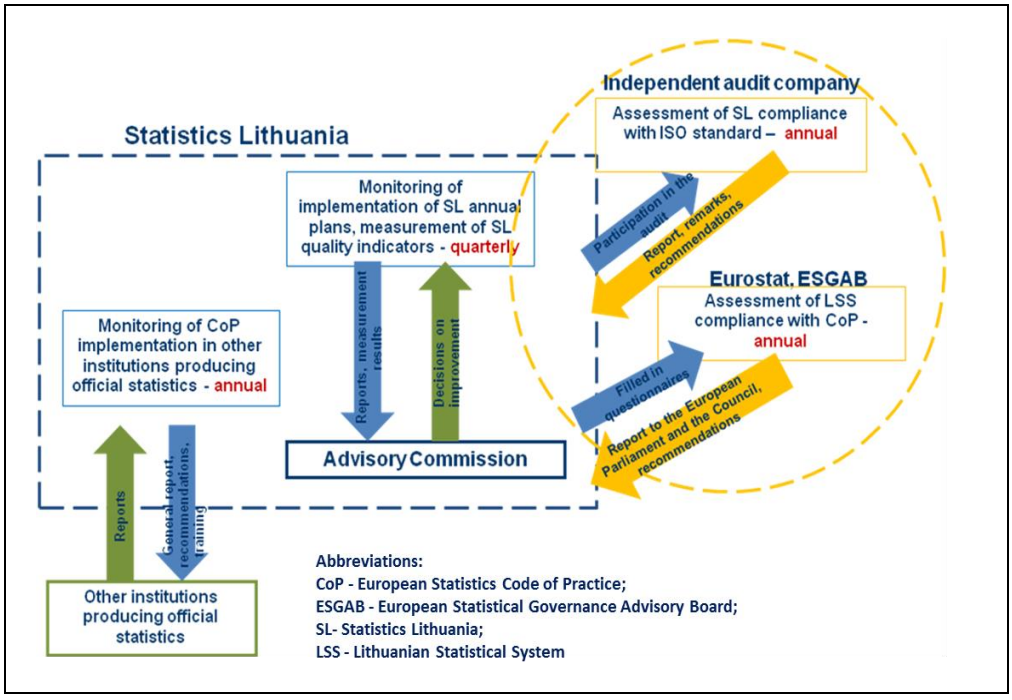


3. Quality monitoring

Cornerstones of the ISO-based quality management system are quality monitoring and assurance, which have to lead to clear orientation towards user's needs, measuring and monitoring processes and statistical outputs quality. With such a view, a system for measuring and monitoring of the quality indicators was introduced at Statistics Lithuania. Procedures and processes, documented according to the ISO requirements, have formed a good basis for developing the system.

The set of regularly monitored quality and performance indicators covers standard ESS quality indicators and other indicators related to different stages of statistical and other processes. Monitoring of the Code implementation and quality indicators is demonstrated in the scheme (See Figure 2).

Figure 2. Monitoring



Standard ESS quality and performance indicators comprise of such indicators as data completeness rate, sampling error indicators, over coverage, unit/item non-response, imputation rate, time lag (between the end of reference period and release of first/final results), punctuality, length of comparable time series, number of consultations, metadata completeness rate, etc. Other indicators monitored by Statistics Lithuania and related with statistical processes are as follows: response burden indicator, rate of edited statistical reports/items, time spent for different statistical sub-processes (e. g. sampling, data collection, editing and imputation, processing, etc.) in working days, number of simplified statistical report questionnaires, average number of surveys per respondent (entity), etc. Other indicators, such as user satisfaction level or index of public interest in official statistics, show the overall assessment of the quality of statistical products and services of Statistics Lithuania and consist of several sub-indices. User satisfaction level is based on the user opinion survey results and for its assessment the following quality criteria are used: clarity; sufficiency of statistical information; accuracy and reliability; completeness; relevance and awareness (visibility and image) of Statistics Lithuania. The index of public interest in official statistics consists of such sub-indices as the number of unique visitors of the Official Statistics Portal (see [9]), electronic data collection system

E.statistics and Statistics Lithuania's website; number of newly registered users to the Official Statistics Portal; number of individual inquiries and number of quotations in the media. Taking into consideration their significance, different weights are attributed to the sub-indices.

Critical values have been defined for all quality indicators Critical value is the level of the indicator at which special measures to control the process should be implemented, e. g. average time spent by one enterprise for filling in the questionnaire should not exceed 8 hours per year; share of respondents providing data in e-form should not be less than 89 per cent, etc. The critical value indicates the problems, which have to be solved promptly. The definition of critical values allows assuring a preventive approach to the institution's performance management. For some indicators (those related with strategy implementation), the target values are defined for the period of 3–5 years. This allows concentrating efforts and resources on reaching strategic goals and implementing planned changes.

The measures are implemented in accordance with appropriate documentation (measurement procedures, list of indicators, including their descriptions, formulas and measurement periodicity). The list of indicators comprises over 70 indicators assigned to specific processes. It is revised and updated annually. Effective indicators should follow such criteria as clarity and ability to interpret; relevance, completeness, measurability (however, measurement burden should not be too high); appropriate periodicity and reflection of institution's objectives.

A regular analysis of quality indicators is performed at the survey and institutional levels. One of the directions of such analysis is the examination of time spent for different statistical processes and its impact on the quality of statistical output. Another important aspect is the comparison of similar surveys and examination of possibilities for the optimization thereof.

In order not to overburden the Statistics Lithuania staff and to have reliable information on the processes and their results, the major part of quality indicators is calculated automatically, employing the time use system, providing detailed information on the time used for different processes, and a specific system for recording quality characteristics of statistical surveys.

The monitoring results are reported to the top management and discussed at the Director General Advisory Committee meetings at which decisions for further improvements are made (e. g. to control implementation of rescheduled activities; monitor time used for individual statistical sub-processes; define reasons of standout values of time spent on filling in statistical questionnaires and suggest problem solution ways; use administrative data for the calculation of separate indicators in business statistics; organize staff trainings on editing, sampling and other statistical issues). Also, these monitoring results form the input to audits and to management of non-conformities and risks.

Information on quality indicators is published on the intranet of Statistics Lithuania, and every staff member has an opportunity to access and use the information in his or her daily work. Based on this information, statistical survey managers are able to get involved in routine statistical processes and make well-founded decisions on their organization. The majority of quality indicators are also published in the quality reports of Statistics Lithuania (See Section 4).

The possibility to analyze and timely influence processes gave birth to a possibility to consistently improve the timeliness and accessibility of statistical output (see Figure 3 and Figure 4). For instance, during the period of 2008–2016, the average duration of the production and publication of annual statistics decreased by 37 days and totaled to 163 days. The number of datasets published in the Database of indicators increased significantly, as compared to 2008. In 2016, user satisfaction with the services provided by Statistics Lithuania reached 66 per cent (see Figure 5). The increase was conditioned by the consistent efforts of Statistics Lithuania directed to improvement of accessibility of statistical information and related metadata, and also different measures undertaken in order to educate and encourage the use of official statistics.

Significant attention is paid to modernization of the data collection system and strengthening relations with data providers in order to increase response rates and reliability of statistical data, as quality statistics is based on quality data. E. g. during the period of 2012–2016, maximum unit non-response rate in short-term statistics area remained very low (see Table 1).

Figure 3. Shortened time of statistical information release

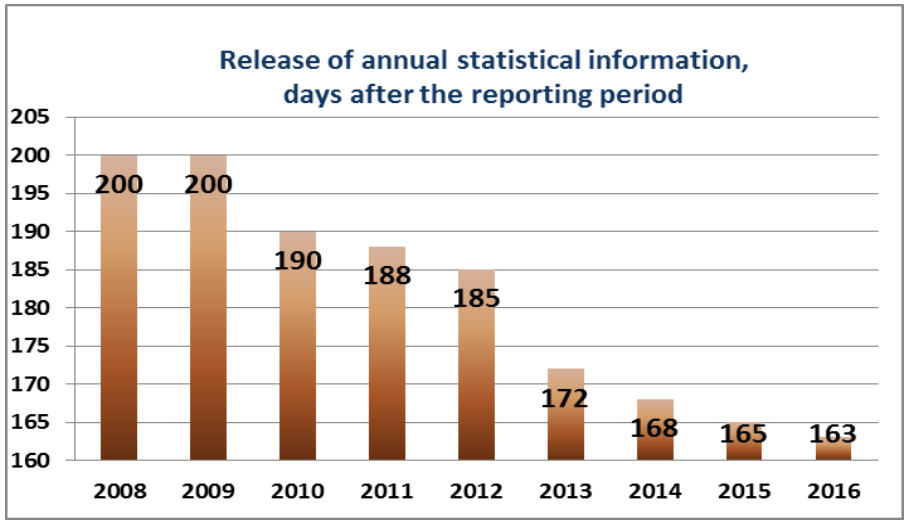


Figure 4. Increasing number of datasets in Database

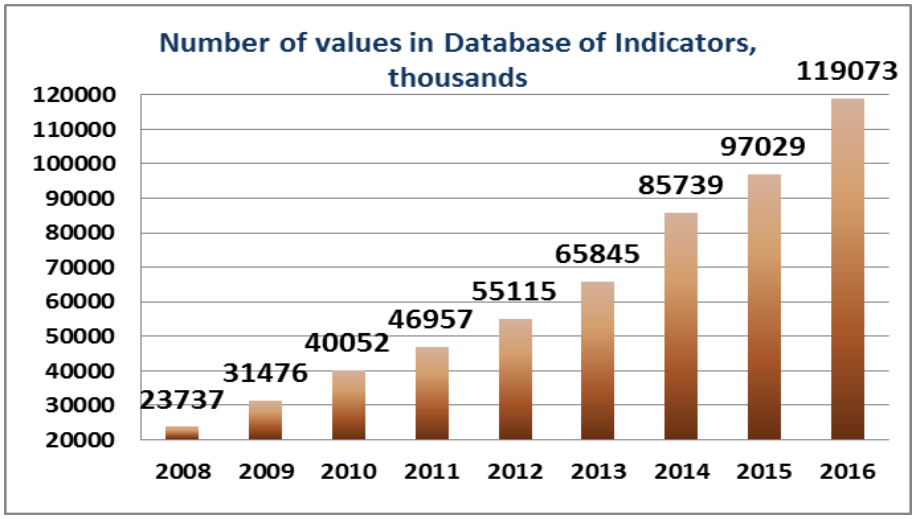


Figure 5. Increasing user satisfaction

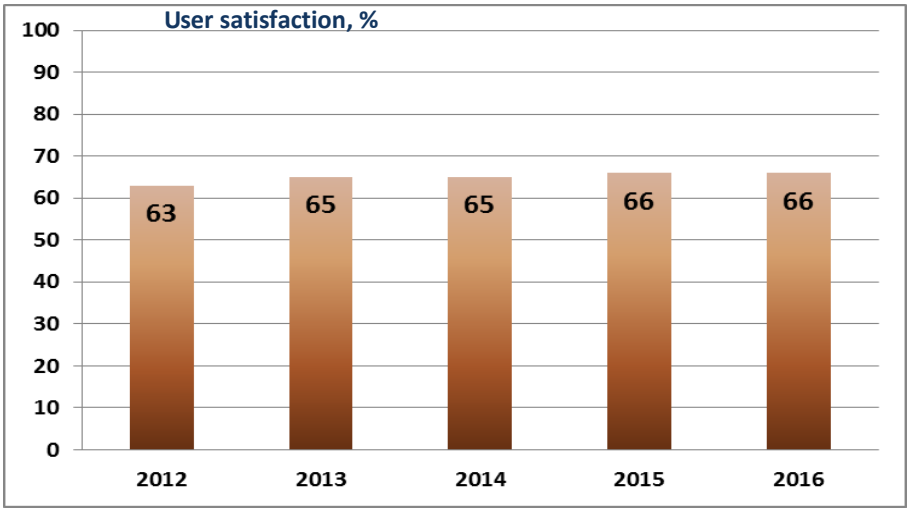


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Table 1. Unit non-response rate (%) in short-term statistics

Statistical Survey (frequency)	**Maximum monthly or quarterly (according to the frequency of the survey) non-response rate per year**				
	2012	**2013**	**2014**	**2015**	**2016**
Industry (monthly)	2.0	1.8	2.4	1.9	1.4
Construction (quarterly)	4.6	2.0	2.3	2.5	3.2
Services (quarterly)	2.5	1.8	2.0	1.8	1.9
Domestic Trade: Retail trade (monthly) Wholesale trade (quarterly)	 1.3 0.9	 1.3 1.5	 1.1 1.0	 1.4 0.5	 1.0 1.0

4. Quality reporting

Unit non-response rate is just one example of quality indicators published in the quality reports of Statistics Lithuania (see Table 2).

Table 2. Quality indicators in quality report (underlined)

13	**Relevance**	**15**	**Timeliness and punctuality**
13.1	User needs	15.1	Timeliness (time lag between the end of reference period and release of first/final results)
13.2	User satisfaction (level)	15.2	Punctuality
13.3	Completeness of statistical information	15.2.1	Percentage of statistical information released on time
13.3.1	Degree of completeness of required information	**16**	**Comparability**
14	**Accuracy and reliability**	16.1	Geographical comparability
14.1	Overall accuracy	16.2	Comparability over time
14.2	Sampling error	16.2.1	Length of comparable time series
14.3	Non-sampling error	**18**	**Administrative burden for respondents** (time used by one respondent to fill in a statistical questionnaire)
14.3.1	Non-response error	**19**	**Revision of statistical information**
14.3.1.1	Unit non-response rate	19.1	Revision policy
14.3.1.2	Item non-response rate	19.2	Revision practice
		19.2.1	Average of the change obtained during the revision

Table 3. Structure of quality report of Statistics Lithuania

1	**Contact**
1.1	Contact organisation
1.2	Contact organisation unit
1.3	Contact person
1.4	Contact person, position, area of responsibility
1.5	Contact person's postal address
1.6	Contact person's email address
1.7	Contact person's phone No
1.8	Contact person's fax No
2	**Metadata update**
2.1	Metadata last certified
2.2	Metadata last posted
2.3	Metadata last update (revision, check)
3	**Statistical presentation**
3.1	Description of statistical information (main characteristics, purpose)
3.2	Classification(s), classification system
3.3	Institutional sector coverage
3.4	Definition(s)
3.5	Statistical unit
3.6	Statistical population
3.7	Geographical coverage
3.8	Time coverage
3.9	Base period
4	**Measurement unit(s)**
5	**Reference (reporting) period**
6	**Institutional mandate**
6.1	Legal acts and other agreements
6.2	Statistical data exchange

7	**Confidentiality (legal acts providing for statistical data confidentiality)**
7.1	Confidentiality policy
7.2	Data confidentiality regulations
8	**Release policy**
8.1	Release calendar
8.2	Link to the release calendar
8.3	Release procedure
9	**Frequency of dissemination**
10	**Dissemination format**
10.1	Press releases
10.2	Publications
10.3	Databases
10.4	Access to micro data
10.5	Other
11	**Methodological documentation**
12	**Quality management**
12.1	Quality assurance
12.2	Quality assessment
13	**Relevance**
13.1	User needs
13.2	User satisfaction
13.3	Completeness of statistical information
13.3.1	Degree of completeness of required information
14	**Accuracy and reliability**
14.1	Overall accuracy
14.2	Sampling error
14.3	Non-sampling error
14.3.1	Non-response error
14.3.1.1	Unit non-response rate
14.3.1.2	Item non-response rate

15	**Timeliness and punctuality**
15.1	Timeliness
15.2	Punctuality
15.2.1	Percentage of statistical information released on time
16	**Comparability**
16.1	Geographical comparability
16.2	Comparability over time
16.2.1	Length of comparable time series
17	**Coherence**
17.1	Cross-domain coherence
17.2	Internal coherence
18	**Administrative burden for respondents (time used by one respondent to fill in a statistical questionnaire)**
19	**Revision of statistical information**
19.1	Revision policy
19.2	Revision practice
19.2.1	Average of the change obtained during the revision
20	**Statistical data processing**
20.1	Statistical data source
20.2	Periodicity of statistical data collection
20.3	Statistical data collection
20.4	Statistical data validation
20.5	Production of statistical information
20.6	Adjustment
21	**Comments, links to related metadata**

Before any statistical information is provided to user, the quality of information is assessed and standard description of the quality is prepared. Quality reports of Statistics Lithuania are based on the ESS Single Integrated Metadata Structure (SIMS) and are developed for all statistics produced by Statistics Lithuania. Statistics prepared by other national statistical institutions (hereafter ONAs) and published on the Official Statistics Portal, are also accompanied by SIMS-based quality reports. The SIMS is a standard framework for the quality and metadata reporting in the ESS. All statistical concepts of the two existing ESS report structures (ESMS and ESQRS) have been mapped and merged creating the SIMS. SIMS-based reports provide information not only on statistics quality, but also describe statistical processing, presentation and other important aspects. The concepts covered by the quality reports of Statistics Lithuania are shown in Table 3.

Quality reports have been completed using the specially prepared templates, detailed instructions and explanations. Some information provided in the reports, e. g. confidentiality policy, release policy, general quality management issues, etc., is standardized and pre-filled in advance, as being applicable to the whole institution. Consultations on compilation of the reports are also provided by the responsible staff of the Methodology and Quality Division, if needed. Procedures, regulating the preparation, updating and dissemination of quality reports are approved by the order of Director General of Statistics Lithuania. The responsible staff reviews the explanatory text in the reports annually and updates it whenever required. Information on quality indicators is updated along with publication of related statistical indicators. Quality check and harmonization of quality reports in order to maintain a standardized approach across the whole institution are performed by the responsible staff of the Methodology and Quality Division. The date of the last update is indicated in the report. The use of such standardized procedures allows increasing efficiency in producing quality reports and ensures the quality of structural and processed metadata. For the time being in total 203 bilingual (Lithuanian and English) reports of Statistics Lithuania have been published on the Official Statistics Portal. Some of them provide information on the statistical surveys as whole, others – on the separate statistical indicators. There are several examples:

- Labour force statistics (pdf);
- Statistics on earnings (pdf);

- Health care activities (pdf);
- Harmonized index of consumer prices (HICP) (pdf);
- Structural business statistics indicators (pdf).

In addition to these reports, Statistics Lithuania, as all other EU Member States, provides Eurostat with the reports on the quality of their transmitted data. Eurostat assesses the quality of received data and publishes report on the quality of European Statistics. These reports are based on the ESMS or ESQRS report structure. Since the SIMS is a combination of these two structures, the above presented SIMS-based quality reports of Statistics Lithuania form a very good basis for the extraction of the reports to be sent to Eurostat. This allows avoiding duplicated efforts of responsible staff for quality reporting, both nationally and at the European level.

Moreover, in order to reduce the reporting burden and to automatize the management of quality reports, a special IT application has been recently created at Statistics Lithuania. It allows preparation, editing and archiving of quality reports, as well as automatic update of the reports published on the Official Statistics Portal. Reports can be downloaded into HTML or SDMX formats for the dissemination on the Official Statistics Portal or for the provision to Eurostat, etc. Also, the staff is provided with a possibility to generate reports of different structures: the SIMS, the ESMS or ESQRS, to filter out information from the fields of their interest and compare it within the same or between different statistical surveys. It is an internal IT application; however, in the future it will be adapted for the use of ONAs, quality reports whereof are also published on the Official Statistics Portal.

5. Usefulness of quality reports to the users, with focus on researchers and academia

Statistics quality criteria "Clarity and Accessibility", defined in the Code, precisely emphasize the importance of corresponding metadata, especially of quality reports. In order to enable users to interpret and use statistics in a correct manner, as well as to enhance usability and usefulness of the statistical outputs, comprehensive and quality metadata is necessary. It is obvious that a "nude" number without corresponding metadata does not provide any value.

Since users are mainly interested in how well they can rely on statistics and can base their own decisions on it, sound metadata helps to increase user confidence in official statistics. Users of statistics should be guaranteed that statistics are developed, produced and disseminated on the basis of uniform standards, harmonized methods and defined quality requirements. With this in view, quality reports can be considered as providing all relevant information.

Comprehensive metadata is especially relevant to advanced users, such as researchers and academia, as revealed by their opinion surveys, regularly performed by Statistics Lithuania.

Different user opinion surveys have been carried out annually, since 2005. User perception from different perspectives is being assessed, performing the surveys targeted on different user groups; a survey exploring the image of Statistics Lithuania; surveys focusing on improvement of the services of Statistics Lithuania, etc. All surveys follow a uniform structure, target user groups, approach, prompt and immediate follow-up procedures. The surveys maintain a regular block of uniform questions (covering the principles of the Code): relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity, as well as of national interest (awareness) and ad-hoc questions relevant to a specific surveyed target group or opinion on topical emerging events.

Researchers and academia, being one of the most important target user groups of Statistics Lithuania, are surveyed every two years. The recent survey was conducted in 2017. The survey revealed that researchers and academia identify accessibility and clarity of statistics as very important quality criteria when using statistical data for their research, lectures, preparation of term papers and dissertations, as well as for self-education. Since 74 per cent of the survey respondents rated the accessibility and clarity of statistics

very well and well, we see the growing need for more comprehensive and publicly available metadata (quality reports).

Statistics with clear metadata facilitate proper interpretation and meaningful comparisons of statistics in many ways. Quality reports allow researchers to know what phenomena are represented by statistics and how they were produced starting from the data collection and ending with the release of final results. They give researchers a clear picture of the quality of statistics they analyze. According to the recent opinion survey, the number of researchers, interested in information provided in quality reports, has increased. Deep analysis of statistical data requires better understanding of the main procedures, methods and best practices used in the compilation of statistics, including the use and integration of administrative and other data. All quality dimensions are concerned, but accuracy is on the top. Coefficient of variation and confidence interval are mostly used sampling error indicators among researchers.

In addition to user opinion surveys, researchers and academia, as all other users, are provided with a possibility to put forward suggestions and comments by e-mail, phone and via the Internet, attend meetings and trainings, which are regularly organized by Statistics Lithuania. Received suggestions and comments are analyzed and improvement actions are defined. For example, considering the opinion of researchers and academia, remote access to anonymized micro-data for research purposes has been created. It provides two possibilities to analyze confidential data in virtual environment – using either SPSS or R statistical packages. Moreover, anonymized datasets (public files on statistical units) have been prepared and published on the Official Statistics Portal. Users can access the public files of the Labour Force Statistical Survey, Adult Education Statistical Survey, Income and Living Conditions Statistical Survey and Household Budget Statistical Survey. These public data files are free of charge. And, of course, the range of information about the methods used for a particular survey and the quality of statistics disseminated has been expanded.

It is foreseen to further enhance the accessibility and clarity of statistics by preparing infographics, explaining the statistical methodology, developing a special package of services oriented to scientific community, etc.

6. Conclusions

Finally, it can be stated that quality reporting is one of the most important quality assessment and improvement tools, which is useful not only to users. It makes statistical survey managers to be aware of different quality issues in relation to their own surveys with the view to initiate improvements.

Quality reports are the key reference documents for quality assessment regarding the monitoring of quality indicators, moreover, they form a good input for statistical audit or self-assessment exercises with the objective to:

- improve quality characteristics of statistical information and provide users with quality assurance;
- guarantee that statistics are developed, produced and disseminated on the basis of uniform standards and harmonized methods;
- enable users to interpret and use statistics in a correct manner;
- enhance usefulness of the statistical outputs (in relation to accessibility and clarity aspects, stated in the European Statistics Code of Practice).

The importance of more targeted cultivation of statistical literacy should be also emphasized. Enhancement of usability and effect of statistical information on society development and visibility of statistical institution's activities highly depend on statistical literacy level of the current and new generation of users, capable to understand and apply statistics in daily life and decision-making.

The above listed leads to greater transparency of statistics and its production process and, thus, to increased user confidence in statistical institution and its services. Furthermore, attracted and retained confidence of the customer is one of the values declared in the ISO standard for quality management.

It is obvious that effective quality management is very complex and requires a lot of efforts from the entire institution. Nevertheless, Statistics Lithuania keeps on following its direction: to work, solve problems, find the most effective ways to harmonize the institutional and individual staff interests and be more focused on user needs and expectations.

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STATISTIKOS KOKYBĖS STEBĖSENA IR KOKYBĖS ATASKAITŲ RENGIMAS

Laura Lukšaitė-Balakauskienė

Santrauka. Straipsnyje pristatomi pagrindiniai Lietuvos statistikos departamento kokybės vadybos sistemos, atitinkančios kokybės vadybos sistemų standarto ISO 9001 reikalavimus, principai. Aptariama, kaip ši sistema padeda didinti vartotojų pasitikėjimą statistika, atliekant nuolatinę statistikos kokybės stebėseną ir rengiant kokybės ataskaitas. Paaiškinama, kaip statistikos kokybė yra matuojama ir pristatoma visuomenei; aptariama kokybės ataskaitų nauda statistikos vartotojams, ypač mokslininkams ir akademinei bendruomenei. Taip pat pateikiami kai kurie statistikos kokybės stebėsenos rezultatai ir kokybės ataskaitų pavyzdžiai.

Reikšminiai žodžiai: ISO 9001, kokybės stebėsena, kokybės ataskaitų rengimas, į naudotoją orientuotų ataskaitų rengimas, ESS SIMS.