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QUALITY STRATEGY

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INTRODUCTION

SORS Quality Management System relies on the Mission and Vision of the official statistics of the Republic of Serbia, European Statistics Code of Practice – CoP, and principles of Total Quality Management – TQM, which represent the common framework of European Statistical System Quality.

Mission

"The main mission of the official statistics is to provide relevant, unbiased, reliable, timely and internationally comparable statistical indicators. Owing to coordination of responsible producers of official statistics and active participation in international statistical cooperation, the released results of official statistics can meet the requirements of decision-makers, researchers and other users, and can be used as a basis in monitoring policies related to the economy, society and process of accession of the Republic of Serbia to the European Union. Data collection, processing and dissemination are performed by applying obligatorily methodological organizational knowledge, statistical standards, modern technology, statistical confidentiality, optimal use of resources, reasonable burden on data providers and equal accessibility of data to users."

Vision

"By strengthening professional and infrastructure capacities, adopting and implementing best statistical practice, the Official Statistics System of the Republic of Serbia should reach a high-level harmonization with international statistical standards as well as high-level data quality and data providers' and users' confidence."

Values

The mission and vision of the official statistics rely on:
- production and release of quality data using the best international experiences in data collection, processing and dissemination methods, the principles of efficiency, user orientation and by constant advancement of human potentials;
- mutual confidence of all statistics stakeholders, i.e. data users, providers and official statistics producers, and
- constant cooperation of official statistics producers in the country and abroad.

European Statistics Code of Practice

The European Statistics Code of Practice was adopted by the European Statistical Council in February 2005 and revised in September 2011. This code has 15 principles concerning the institutional environment and statistical processes. Its objective is to make sure that statistics produced within ESS are not only relevant, timely and accurate but also in compliance with the principles of professional

independence, impartiality and objectivity. A series of indicators of good practice for each of the 15 principles give a reference for measuring the application of this code.

SORS has adopted the European Statistics Code of Practice upon which it has built its quality management system.

Total quality management

The Statistical Office of the Republic of Serbia, as other national statistical organizations, is under constant pressure by the society that requires a growing number of data that need to be produced cost-efficiently, with minimum burden on data providers and in the shortest deadline possible. In such a case, the methods and tools that may help improving statistical production processes are of extreme importance.

Analysing different models for statistical process and product quality monitoring, and having in mind ESS common framework, SORS has chosen the model Total Quality Management. Accordingly, SORS strives to improve continuously the quality of statistical products and services it provides to its users, and to have its staff involved in achieving this goal. The main requirements for reaching this objective are commitment to quality and motivation to improve quality in all working processes.

The model Total Quality Management defines generally the areas of activity and criteria that must be taken into account in quality management. Accordingly, SORS has defined four areas for continuous quality improvement:

1. User orientation
2. Quality of statistical products and processes
3. Strengthening the cooperation with data providers
4. Staff professional development and satisfaction

The strategy for continuous quality improvement for each of the four defined areas is described below.

1. USER ORIENTATION

User orientation is one of the main SORS values. Understanding user needs for statistics is part of the major prerequisites for the quality of statistical processes and services. Statistical products and services must be adapted to user needs.

For this to be achieved, it is important for us to enter into a continuous dialogue with a wide range of our users and thus become better acquainted with their needs and use of our products and services.

1.1. User satisfaction monitoring

User satisfaction is the corner stone of the Total Quality Management model. A statistical product is considered being of good quality when satisfying user needs. This is why it is very important to obtain information on user needs and attitudes towards statistical products and services.

The User Satisfaction Survey is a traditional tool for quality management. The specificity of the survey is that users' satisfaction cannot be measured directly because this is a hidden variable which contains user subjective assessment of product and service quality. The obtained assessment reflects two components of users' experience: product adaptation to users' requirements and product reliability.

The User Satisfaction Survey was our starting point in quality development. SORS launched in 2010 a general survey on user satisfaction with statistical products and services in order to assess the importance and usefulness of the statistics that we produce. The second User Satisfaction Survey was conducted in 2013 when SORS developed a web application (new tool) for the collection of data for this survey. With the ever-changing user needs, after the second survey SORS decided to carry out the general user satisfaction survey at two-year frequency.

In order to enhance concrete statistical products and services, occasional specific surveys need to be conducted so to grasp user satisfaction and improve the products and services according to user needs. As the website is the main channel of dissemination, it is necessary to monitor permanently user satisfaction via the website. The User Satisfaction Survey concerning a particular statistical domain, which would be carried out via a web survey that includes questions on quality, confidence and dissemination, is an activity that SORS envisages to conduct in the next period. The results of such a survey help to better understand user needs and provide certainly information on users' perception.

1.2. Development of cooperation with users

We have to share the comprehensive statistical knowledge that we possess with users by means of the services we offer.

The development of communication with users will be oriented towards key user groups: government administration, the media, local authorities, organizations and business entities, scientific organizations and educational institutions.

By organizing seminars and workshops SORS strive to pass on the statistical knowledge to users for better interpretation and use of data. This type of seminars is primarily intended for the media, business entities, local authorities, pupils and students.

1.3. Advancement of data timeliness, accessibility and clarity

Timeliness (the difference between the end of the reference period and the date of the release of data) and punctuality is, as perceived by users, as one of the most important principles of quality. SORS strives to reduce as much as possible the timeliness of release and to harmonize it with the international standards of data dissemination. We should deliver what we promised the users, and if we are not able to do so, we must inform them in due time about the new release of data. SORS respects strictly this principle and makes the annual release calendar available to users on its website.

Constant monitoring and updating of the calendar is indispensable, and all divergences from time schedules in the calendar are explained and publicized in advance, in accordance with the Law on Official Statistics (Article 40). As a result, a report on timeliness and punctuality is drawn up. The report provides information on divergences according to which further measures are taken to improve the process, the outcome being timely data release.

In the next period SORS will develop IT solutions for monitoring timeliness and punctuality of release as well as the harmonization of release with international standards.

SORS strives to be proactive by following the progress of IT technologies, having in mind the development of society and technological possibilities in order to make the data available to users.

The website, including the dissemination database, is the central channel for the dissemination of statistical products and services. The website needs to be adapted to new IT solutions and constantly uploaded with new content. The goal is to provide the users with easier search of data, make the statistics more appealing, give access to contents through social media, blogs, and the like, provide larger accessibility by making it possible for users to transfer a content to third parties, and to improve the existing channels of communication via which users can download certain statistical products (RSS, Twitter and Mailing list service).

Time is crucial as far as user satisfaction is concerned. Therefore, SORS will endeavour in the next period to offer applications for data download via mobile telephones and tablets to its users, as well as to further develop the web service including API (application program interfaces).

The development of the area of data visualization, infographics and digital publications is a challenge for SORS in the forthcoming period.

Access to microdata without identifiers (anonymised microdata) and their dissemination to researchers is one of the activities that SORS plans to improve in the next period.
Statistical data and information we offer to users must satisfy the criterion of clarity. Access to metadata, which offer enough information for quality assessment to users, is vital for a user to understand data.
Reference metadata will be available to users on the SORS website. Every indicator in the dissemination database will be accompanied by corresponding reference metadata.

The enhancement of statistical literacy contributes to better understanding of statistical data and information. In developing this area the focus is primarily on students and pupils, through trainings and workshops (weblogs, e-publications).

2. QUALITY OF STATISTICAL PRODUCTS AND PROCESSES

Providing high quality statistical products and processes is among the SORS main objectives. SORS strives to meet user needs, thus applies five dimensions of quality cited in the European Statistics Code of Practice and related to statistical products: relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility and clarity. Based on these quality dimensions SORS is working on installing a system for regular monitoring of product quality. Naturally, product quality comes from the quality of statistical processes. The key activity, particularly in the phase of introducing the quality management system, is the identification of all the processes in the statistical production chain, detailed breakdown and description of the processes, sub-processes and activities therein. Statistical processes are the core of the production of statistical products. They should be conducted efficiently, rationally and with minimum resources. The required quality of results is obtained through constant monitoring and analysis of the processes.

Because of all mentioned above, SORS is engaged in the monitoring of the quality of statistical products, implementation of the Generic Statistical Business Process Model, monitoring of the realization of statistical processes and establishment of the statistical metadata system.

2.1. Monitoring of the quality of statistical products

SORS plans to implement a system for regular monitoring of the quality of statistical products on the basis of regular reporting and then to undertake adequate measures to improve their quality. The main source of information on product quality will be the quality reports, which contain information on quality indicators. Up-dated quality reports can be drawn up via the system RZSMETA.

2.2. Implementation of the Generic Statistical Business Process Model

Processes occupy a central place in all the quality management systems, therefore quality improvement involves almost always previous process improvement.

Relying on international standards, recommendations and best practice, SORS has decided to implement the Generic Statistical Business Process Model (process model) as a standard tool that describes and defines thoroughly a set of indicators needed for the production of official statistics. This model provides a standard framework and harmonized terminology that allow the modernization of statistical production processes, as well as the share of methods and components. It is also used for the integration of data and metadata standards as a template for process documentation, for the harmonization of the statistical computer infrastructure as well as for providing the framework for process quality assessment and improvement.

In the next period, activities will be conducted on the application of this model to work processes in SORS and on defining an adapted model of process that will fit the SORS work organization. Based on the established model, further actions will be focused on the preparation of corresponding documentation for all statistical processes.

2.3. Monitoring statistical process implementation

The main objective of quality management is constant improvement of statistical processes, thus enhancement of the quality of statistical products.

To meet users' needs in an efficient manner, SORS plans to ensure continuous monitoring and improvement of statistical process quality in the forthcoming period.

The development of the system of monitoring the implementation of statistical processes will allow obtaining feedback on the course of the process, detecting "bottlenecks" and labour costs, making control easier, assessing and examining the changes in the process and working on its improvement.

Process measurement is crucial for working on the improvement of its quality. Therefore, it is important to identify and measure the key process variables, and analyse the results of the measurement. "Key process variables are those factors that can vary with each repetition of the process and have the largest effect on critical product characteristics, i.e. those characteristics that best indicate the quality of the product'' (Jones and Lewis, 2003).

Consequently, SORS envisages to develop a system for monitoring the implementation of statistical processes, as well as to conduct activities related to the identification and measurement of key process variables.

2.4. Establishment of a statistical metadata system

Metadata are „data that explain and describe data" (data on data). In the strict sense, metadata are defined as „all information relevant to the collection, processing, dissemination, access, understanding and use of statistical data" and as metadata management over time. The system of statistical metadata includes:
- structural metadata (metadata represent the central repository of statistical metadata that serves as a source to other databases they support: design (e.g. questionnaire), statistical production (operational metadata), dissemination and management (decision-making)
- reference metadata (metadata that describe the content and quality of statistical data – conceptual, methodological and quality metadata)
- operational metadata (represent physical implementation of certain concepts and the method of processing (creation/transformation) data in a statistical production process.

Good metadata management is crucial for efficient functioning of statistical processes. They provide information used for assessing and improving product and process quality.

Considering the importance of statistical data, SORS has decided to work intensively on the development of this system where statistical metadata are produced, used and stored.

In SORS there is an on-going development of structural metadata that will consist of several sub-systems concerning statistical activities conducted in the scope of the statistical system: concepts, surveys, documentation, data sources, data collection tools, classifications and code lists, data collection methods, units and variables. All sub-systems should be linked between each other (according to the defined model of data) in order to reach the next level – integrated structural metadata.

Considering that classifications and code lists are one of the main tools for data collection, processing and dissemination, SORS uses a large number of national and international classifications and code lists for statistical surveys and other statistical activities. Classifications and code lists are among the most important sub-systems in the scope of structural metadata. For the purpose of classification and code list management a system will be developed, which will cover the database of national and international classifications, code lists and correspondence tables, as well as an application for maintaining and viewing classifications and code lists.

SORS has recognized the significance of reference metadata and quality reports and created a system for drawing up those documents (RZSMETA). This system has been created along the Eurostat standard structure SIMS 2.0. The system RZSMETA is made of a metadata repository (SQLSERVER database) and an application allowing the users of the system to create reference metadata and quality reports. Adequate supporting documentation has also been prepared, which is intended to help the users of the system in producing reference metadata and quality reports. In the next period regular up-date and improvement of the system RZSMETA and supporting documentation will be undertaken.

3. STRENGTHENING THE COOPERATION WITH DATA PROVIDERS

SORS gives special attention to activities on strengthening cooperation and reducing the burden on data providers, both by using more and more administrative sources as well as modern techniques of data collection that save time and reduce data providers' response costs. SORS works constantly on increasing data providers' motivation in the sense of timely delivery of quality data, applying appropriate measures of personal data protection, which is guaranteed by the Law of Official Statistics (Official Journal of RS, n° 104/2009).

3.1. Monitoring the burden on data providers

Following the adoption of an action plan, which implementation implies carrying out procedures and activities that measure precisely the burden and costs of respondents' reporting, SORS has set up a mechanism for monitoring the burden on data providers. The analysis of the actual burden on data providers will facilitate undertaking coordinated actions to reduce the burden.

In order to monitor and even out the burden on data providers SORS has introduced a method of coordination of random samples. In this way, overlapping of samples of different surveys is being controlled, burden on data providers reduced and comparability of different statistical survey increased.

3.2. Reducing the burden on data providers

The necessary prerequisite for strengthening the cooperation with data providers is a continuous search for ways of reducing their burden. This can be achieved by using more and more administrative sources, e-questionnaires and laptops/tablets in field work as a way of providing data.

Administrative data sources are datasets that are created through special laws and procedure by certain administrative bodies in view of exercising rights or imposing obligations to legal or physical persons. The use of administrative data sources for statistical purposes contributes directly to reducing the costs of statistics production and the burden on data providers.

From SORS point of view, the use of administrative data sources is a necessary activity that enables efficient and rational building of the statistical system, where all administrative data sources at any level, in addition to the main reason why they have been created, are observed as a statistical potential, and that with minor or greater adjustments can be used for statistical purposes and reduce the burden on data providers, the latter being an important goal.

This SORS approach has resulted in a formal creation of an organizational unit which main mission is to increase the number of uses of administrative sources by increasing the use of already utilized administrative sources and exploring the possibility of using new administrative data sources.

Because of all mentioned above, the cooperation of SORS with the institutions that own administrative sources is very important, as well as the common coordination of the introduction of new administrative sources and development of the existing ones.

In the previous period, the most important activity that had direct impact on the reduction of costs and time spent in completing the questionnaires was the intensive use of electronic/web questionnaires. Reporting units have accepted well this method, and in certain surveys it is the prevailing or almost the only method used to transmit data. SORS aims at extending the use of this method to all the surveys where it is possible.

In certain surveys, laptops/tablets are used to collect and enter data, which reduce the time of interviews and increase the quality of data providers' responses. It is envisaged also to extend the use of laptops/tablets to other surveys.

3.3. Establishing cooperation with major data providers

In most business statistics surveys as well as in certain macroeconomic surveys there are a minor number of large reporting units without which data it would not be possible to obtain valid results. Because of their size and importance such reporting units deserve a "special" statistical treatment in order to obtain quality data in optimal timeframe.

SORS envisages establishing a direct mutual cooperation (partner relationship) and the highest level of confidence with all those units, which eliminates at least any misunderstanding and contributes to

obtaining results in a more efficient and better manner. The coverage of such units has to be planned carefully and realized gradually.

Also, such approach means that data are to be collected from those reporting units in a way that suits them most, whether it is a matter of selecting a method of collection, introducing a questionnaire that would replace several questionnaires of different statistical surveys, introducing direct taking over of financial positions from the accounting systems of reporting units, etc.

4. STAFF PROFESSIONAL DEVELOPMENT AND SATISFACTION

Having in mind that staff competence, professionalism and motivation need time to be built and realized, SORS regards the employees as a key factor of its success, and strives constantly to improve their satisfaction and competence.

In order to achieve the aforesaid it is necessary to monitor the level of employees' satisfaction, organize continuously trainings for the employees and to enhance internal communication because only a satisfied and motivated employee, having adequate knowledge and skills, can contribute to better work and successful achievement of goals.

4.1. Monitoring the level of staff satisfaction

Human resources are the main element and factor of investment that need to be managed. This is why activities are not only focused on increasing staff satisfaction, but also on their motivation and commitment to work.

Analysing staff satisfaction (attitudes, opinions) is an integral part of human resource management and, naturally, of quality management. Monitoring staff satisfaction is one of the key tools to improve the level of the quality of the results of each organization, whatever the performed activity.

SORS carried out the first survey on staff satisfaction in 2011, then in 2014 and 2016. SORS decided to conduct this survey from now on at a two-year frequency.

The survey collects information on staff opinions and attitudes, by the following segments: satisfaction with working conditions, satisfaction with work and work content, satisfaction with the level of information, conditions for promotion and reward, etc.

The employees are not required to participate in the survey, but do contribute by participating to obtain a clearer picture of their actual needs.

The challenge for SORS is to recognize on the basis of the survey results the key needs that are the most important for the largest number of employees, and according to that to make an action plan. The action plan contains the most significant activities which SORS will undertake in order to increase staff satisfaction. Also, it is necessary to monitor the realization of the activities defined in the action plan.

4.2. Staff vocational training

The main assumption for a successful development of an institution, which should follow scientific and technological progress, is the planning and vocational training of staff. Staff training is necessary in order to adapt the employees to modern business conditions and is one of the main functions of human resource management.

SORS invest continuously in the training of its employees because qualified and well-motivated personnel are the main stakeholder in improving working conditions, efficiency and quality. Trainings are realized depending on the availability of financial resources. After evaluation of the resources spent, cost justification is analysed.

According to its needs and possibilities SORS organizes vocational trainings for the employees in order to have the duties accomplished timely, efficiently and professionally, all of this for the purpose of modernizing and increasing the quality of work. Accordingly, internal trainings are held and the employees attend national and international meetings, conferences, gatherings, seminars, workshops, trainings, etc.

Training should be deemed by all the employees as a motivation and need, which would broaden their competences for better performance of work.

SORS gives also a growing attention to vocational training of new employees, which goal is to have the new employees acquainted with all the SORS activities in general, as well as with the activities specific to the organizational unit the employee is assigned to.

SORS will try very soon to evaluate the quality of the organized trainings. It is a process where information is collected about the efficiency of trainings, i.e. the benefit that the trainings provide to SORS and the participants.

SORS will continue to develop the organizational unit of human resource management, which mission will be to deal with the activities related to employees, their training and development, motivation and recruitment. The unit will also be engaged in the processes of SORS development and organization in terms of human resources, the preparation of various legal documents and support to the system of internal training.

4.3. Enhancement of internal communication

Better communication between the employees is one of the principles of human resource management. Communication establishes cooperative relationship between managers and the employees. Managers should build their own style of communication with the employees, associates as well as with their superiors, according to the principles of successful and efficient business communication.

Therefore, SORS enhances the development and content of the Intranet portal, as the most important mean of international information, and improves continually internal communication.

The Intranet portal was built in 2008 in view of providing the employees, in one place, with easier access to information, documents and applications. SORS develops constantly the content of the Intranet portal because this way the employees are better informed, thus enabling smooth performing of work and enhancing the management of activities.

The Management should create a climate of cooperation and confidence among the employees in order to turn possible negative interactions into positive ones. Cooperation needs to be established among the employees and services instead of competition. Conflicts result in a fall of productivity and work quality as well as in disturbed interpersonal relationships.

SORS initiates constant communication among the employees at all levels. Motivation for work, productivity and work quality are conditioned directly by interpersonal relationships and internal communication at all levels.

Through the Staff Satisfaction Survey SORS measures, among other things, the degree of staff satisfaction with internal communication, and based on the survey results encourages communication where there is low level of staff satisfaction.