Implementation of a Risk Management System in Polish official statistics as an element for improving effectiveness and quality of completion of assumed goals and strategy

1. The approach to risk management in Polish official statistics:

• The practice in the process of implementation of the Risk Management System the general characteristics of the risk management system in the Central Statistical Office of Poland:

The *Risk Management Methodology* was introduced in the Central Statistical Office (CSO) in 2015. It set the framework for the Risk Management System in the CSO and other units of official statistics (i.e. 16 statistical offices, the Central Statistical Library, Statistical Computing Centre, Statistical Publishing Establishment and the Research and Statistical Education Centre of CSO). In 2016, after a year of experience, some changes in the current Methodology were introduced to facilitate the functioning of the system by, among others, changing the frequency of meetings of the Risk Team, commitment of risk owners in the CSO to transfer strategic risks to the Risk Coordinator in the CSO, and not as before, operational and strategic risks, commitment of risk owners in service units of official statistics to transfer extracts from the risk registers.

This *Methodology* regulated the process of risk management in the Central Statistical Office, determined basic responsibilities, duties and powers arising from the risk management process, as well as the methodology used to identify, analyse and assess risks in the units of official statistics. The risk management process it has been carrying out (which is very important) by all employees within their duties and functions. The objective of the risk management system was identifying risks and taking action to maximize the potential opportunities and minimize the threats associated with the occurrence of risk. The essence of the systematic approach to risk management was to ensure that all significant risks in the official statistics units are identified and assessed on an ongoing basis, and where appropriate there are developed and implemented action plans to ensure the adequacy of risk management in relation to its significance. An equally important aspect was to ensure reproducibility and

comparability of the results of the risk assessment made in all areas of activity and in all units of official statistics through a uniform risk assessment methodology.

The introduced Risk Management Methodology ensured effective communication in the field of risk assessment methodology standards between different organizational units of the Central Statistical Office and other units of official statistics. This document precisely defines responsibilities associated with managing individual risk areas, in particular duties of the CSO Management, risk owners and other employees.

The Risk Team was established in the CSO and a Risk Coordinator role was established. The Risk Team is composed of: the Vice President of the Central Statistical Office, the Civil Service Director, the Director of the President's Office, Head of Finance and Accounting, Representatives of Risk Owners in CSO, The Risk Coordinator in CSO, Representative of Risk Owners in units and Coordinator of independent position for the internal audit. In the CSO meet at least every six months. The President of the CSO may participate in works of the Team. The team is responsible for: giving opinions on the results of risk analysis and assessment in the CSO, recommending the level of acceptability of risk in the CSO and endorsing of strategic unacceptable risks including the opinion, evaluating proposed methods for dealing with risks in the CSO and recommending them to the President of the CSO. The team also recommends actions for the integration of risk management with other processes in the management and planning in the CSO and set the same standards for identification, analysis and risk assessment in units of official statistics.

The role of the Risk Coordinator in CSO is, in particular: the maintenance of collective Risk Register in the CSO, collecting and analysing information on different types of risk received from the risk owners, monitoring processes of identification, analysis and risk assessment and developing general risk information for the needs of the President of the CSO and the Risk Team. The Risk Coordinator is also responsible for monitoring the plan and implementation of actions in response to the risks. He shall submit proposals of separate strategic risks unacceptable in the CSO to the Risk Team.

Analysis and risk assessment in the CSO, the risk analysis and assessment is carried out on a regular basis, while update of Risk Registers is done at least every six months. All identified risks within specific areas and risk categories are being introduced into the Risk registers of their respective owners available in electronic form.

Table 1. Risk areas and categories

Risk areas	Risk categories ¹				
	1.1. Statistics works				
1. The activity of the CSO,	1.2. National official registers (REGON and TERYT)				
and units subordinate to the President of the CSO	1.3. Organisation				
and entities supervised by the President of the	1.4. Internal audit and control				
CSO	1.5. Communication				
	1.6. Management				
	2.1. State budget				
	2.2. Expenditure planning				
2. Financial resources	2.3. Disbursement of funds (national, foreign)				
	2.4. Public procurement				
	3.1. Staff competencies				
3. Human resources	3.2. Fluctuation of staff				
	3.3. Organisation of trainings				
	4.1. Real estate				
4. Tangible or intangible	4.2. Information and communications infrastructure				
assets	4.3. Tangible				
	4.4. Intangible				
	5.1. Changes in environment				
5. External risk	5.2. Legal modifications				
	5.3. Random events				

 $^{^{1}}$ The list of identified risk categories. It is subjected to extension in case of identifying a new category regarding the identified risk areas.

	STRATEGIC RISK REGISTER											
	Description of the risk					Assessment of the risk			Evaluation of control measures effectiveness			
No.	Organisational unit	Risk area	Risk category	Name of the risk	Strategic objective	Causes of the risk	Impact of the risk	Probability of the risk	Importance of the risk	Expected impact of the risk on the task (description)	Control measures (description)	Effiectiveness of control measures

Table 2. Template of Risk Register

According to the methodology adopted in the CSO, residual risks are being assessed in Risk registers (the risk owners are making those risk assessments taking into account the functioning of control means). In the Risk Management Methodology three-scale risk assessment impact and probability of risk occurrence was introduced.

Table 3. The impact of the risk and the probability of risk occurrence

Scale		Assumptions			
Risk impact					
High	3	The event covered by the risk causes damage with a critical or great impact on the implementation of key tasks or to achieve goals, serious harm to the quality of tasks performed, a serious financial loss or adverse effect on the image of the individual. The occurrence of an event covered by the risk involves a long and difficult			

process to restore the previous status.							
		The event covered by the risk causes an average loss of available resources, has a					
Medium	2	negative impact on the efficiency, quality of performed tasks and the image of the individual. The occurrence of event covered by the risk involves difficult process to restore the previous status. The event covered by the risk cases average financial loss.					
Low	1	Slight disruption or delay in the performance of tasks. It does not affect or may partly affect the image of the individual. The effects of the events can be easily removed. The event covered by the causes average financial loss.					
	The probability of risk occurrence						
High	3	There are reasonable grounds to believe that the event covered by the risk almost certainly occurs.					
Medium	2	There are good reasons to believe that the occurrence of an event is probable.					
Low	1	There are reasonable grounds to believe that it is unlikely that event covered by the risk occurs.					

According to the risks map adopted in the above mentioned document the following types of risks are distinguished:

- negligible risk (low) is the lowest risk requiring monitoring;
- moderate risk (medium) which should be discussed at regular management meetings and internal meetings and should be monitored. In some cases, the unit may undertake further action;
- serious risk (high) unacceptable that requires an urgent reaction of the head of the unit, aiming at decreasing the risk to an acceptable level.

	High 3	3	6	9
Impact	Medium 2	2	4	6
	Low 1	1	2	3
		Low 1	Medium 2	High 3
Probability				

Table 4. Map of Risks- dot matrix of assessment of risk importance

Risk registers containing only identified strategic risks are transferred by their owners to the Risk Coordinator in the CSO. The Risk Coordinator in the CSO analyses the received data in order to identify proposals of strategic unacceptable risks. The Risk Coordinator in the CSO presents to the Risk Team proposed strategic unacceptable risks and proposed plans for dealing with unacceptable strategic risk in the CSO.

The Risk Management Methodology also includes monitoring of risk management processes occurring in other units of official statistics through analysing and monitoring which is done by the Risk Coordinator in CSO the transfer by risk owners in units the extracts from the risk registers and declarations ensuring the efficiency, adequacy and effectiveness of functioning risk management system, in particular:

- 1. compliance with internal regulations within the framework of risk management;
- conducting and reviewing the Risk Register and monitor appropriate action in relation to unacceptable risks;
- initiating and implementing measures to increase awareness and competence in risk management among employees.

It should be mentioned that, the CSO for UNECE needs filled in 2016 questionnaires related to experience in implementation of risk management system in statistics. The CSO as an organization is ranked 3rd maturity level.

• Measures taken in order to implement organizational culture based on risk responsibility for every workplace, in particular raising employees awareness of risk management significance:

It is essential that all employees of official statistics services fully understand the basic concept of risk management. Its aim is not to oppose the risks but manage it pursuant to the risk acceptance policy implemented by the management. Therefore the Risk Team (on request of the Risk Coordinator in the CSO) has organized workshops on risk management, the aim of which is to ensure risk owners are acquainted with the current methodology of risk management. At the same time it helped to improve the employees attitude based on risk awareness. These workshops were also to encourage employees to think about how their work can contribute to the favourable relations between identification, analysis and risk assessment, and achieved initial objectives. The workshop was organized in 2016 in two rounds: for the Risk owners in the CSO and for the Risk owners in other units of official statistics.

Due to the fact that the process of risk management had to be supported with a reliable information base, during these workshops functioning system of risk management was not only presented , but also terms used in the document Risk Management Methodology were explained. (operational and strategic purpose, risk, cause of risk, the impact of the risk, the probability of occurrence of the risk, the significance of the risk, acceptable and unacceptable risk). Apart from explaining the above mentioned terms, essential for the process of identification, analysis and risk assessment, there were also exercises foreseen (in groups) related to: identification, analysis and assessment of the residual risks as regards specific strategic objectives of the organization. The difference between the concept of operational and strategic objective, reasons and the risk impact were highlighted during the analysis process. These workshops enabled avoiding further errors in determining risk and its cause, defining control measures and making rational risk assessment (frequent overestimation of risk value).

2. The impact of a holistic approach to risk in all areas of activity, taking into account the dependence between different types of risks on improving the efficiency and quality of implementation of the assumed tasks/goals of the organization.

• The benefits of the risk management system - examples:

Effective use of the risk management system can help organizations to improve the quality of services and use of available opportunities. Risk management also plays an active role in the management of operational and service activity (production), as well as in the implementation of changes the organizations face. This process is a tool that aids organizations to succeed.

Therefore, the risk management process should be implemented throughout the organization. The benefits of a holistic approach to risk are, among others, greater likelihood of achieving the objectives of the organization and implementation of the planned changes. With this approach, the organization is able to make better use of resources and making more informed decisions of the risk. In this organization, there is greater emphasis on correct performance of the relevant tasks, while Management focuses on the really important cases. The result is occurrence of less unforeseen events affecting the entire organization.

The risk owners in the CSO reported the following benefits from the implemented risk management system, which have been applied in preparing the concept of the following changes in statistical surveys and were related to:

- 1. *Retail prices survey* the introduction of regular use of price data through direct by collecting them from the retail chains. In this case, the assessment of risk associated with the withdrawal from the market network, or delayed data transmission or failure, resulted in the creation of diversified data collection system.
- 2. External trade Survey -- the need to implement mandatory microdata exchange between EU countries may allow for significant reduction of response burden. However, due to the high risk associated with the need to control data received from other European statistical offices and the limited possibilities of contacts with entities, a system of data collection was created from respondents, which reduces the burden and at the same time allows monitoring the turnover.

and benefits related to:

- 3. Comprehensive identification of factors affecting the reliable and precise estimate of the costs of statistical surveys and other works in statistics.
- 4. An improvement in the process of preparation of costs to the draft of the Council of Ministers Regulation on the program of statistical surveys of official statistics for the given year.
- 5. Timely and better use of the planned funds.
- 6. Clarification of the rules and monitoring the proper functioning of public procurement procedures.
- 7. The regular monitoring of changes in legislation concerning *Operational Programme of Technical Assistance* 2014-2020 (OP TA), so as the change of the rules governing the implementation of projects funded by the EU does not have a negative impact on the achievement of strategic objectives.

The risk owners in the CSO also reported benefits of the implemented risk management system – examples:

- 1. Introduction of the Risk Management Methodology systematized the knowledge in risk management.
- 2. The risk management system allows for a more comprehensive look at the issue of risk, as well as its regular analysis, taking into account the impact on the entire organization. It helps to identify risks mostly threatening the activity, which allows for appropriate directing undertaken activities and their scale adjusted to the threat.
- 3. The risk management system allows for greater control over risk. Due to the constant monitoring of risk, we are able to currently foresee and counter threats at an early stage. Minimizing the occurrence of criticalities have a beneficial effect on the smooth implementation of statutory tasks for which the unit has been established. In addition, it should be noted that the implemented risk management system indicates the strengths and weaknesses of the organization. In view of the above, it may be useful in planning the future policy of management in statistics.

- 4. Predicting risk, identification of potential causes and taking appropriate measures allows the prevention in respect of adverse events or minimize its effects and use opportunities.
- 5. Implementation of the system increased security level of information used in official statistics, among others, through standardization of keeping the risk register and its ongoing review.
- 6. The system effectively protects the security of processing databases and affects the protection against "leakage" of the most important information resources.
- 7. Determination and assessment of risks during the implementation of ongoing works, resulted that every new venture incorporated into ongoing work is assessed for possible risks.

Risk management is a coordinated activity for directing and supervising the organization with respect to risk, it is also a key business process and part of good practices and means to enhance operational and strategic activities.

The objective of risk management is to reduce uncertainty in decision making, improvement in the pursuit of objectives which can cover various aspects (e.g. financial, security-related, environmental and others) and can be used at different levels, e.g. a strategic, concerning the whole organization , project (venture), product or process.