
**UNIVERSITY OF LIBRARY STUDIES AND
INFORMATION TECHNOLOGY**

REVIEW

By Prof. Eng. Evgeni Petrov Manev, PhD, guest lecturer at the Department of National Security, UNILSIT, accredited in the PF “9.1 National Security” and PhD “3.5 Public Communications and Information Sciences”, on the dissertation submitted for the award of the educational and scientific degree “Doctor”, professional field 9.1 “National Security”, field of higher education 9. “Security and Defence”, doctoral program: "Combating crime and preserving public order".

*The author of the dissertation is **Ivanka Nenova Nikolova**.*

The topic of the dissertation work is "Security in Quality Management Systems".

The basis for presenting the review is the order of the Rector of VUSI No. 148 of 24.06.2024 for the appointment of a Scientific Jury for the public defense of a doctoral dissertation on the topic: "Security in Quality Management Systems" by doctoral student Ivanka Nenova Nikolova.

The doctoral student studied at the National Security Department, VUSI, in an independent form of study, in the doctoral program "Combating crime and preserving public order" in professional direction 9.1 "National Security", field of higher education 9. Security and Defense.

1. Relevance of the problem developed in the dissertation in scientific

and applied scientific terms. Degree and levels of the problem topicality and specific tasks developed in the dissertation.

The content of the dissertation submitted for preliminary review is contained in 178 pp., of which 157 pp. main text, reference sources - 76 pp., of which normative acts - 5 pp., literature sources - 60 pp., internet sources – 7 pp., figures - 63 pp. (not listed at the end of the dissertation), appendices - 2 pp.

The content of the dissertation presented for review contains 158 pages, of which 150 pages are the main text, sources of knowledge - 155 pcs., of which literary sources - 53 pcs., Internet sources - 102 pcs., tables - 2 pcs., diagrams - 4 pcs., figures - 12 pcs.

The security of the organization is the basis of its successful functioning and achievement of the social goals for which it was created. The security of the organization is directly related to the efficiency of its functioning. From this point of view, the effectiveness of functioning depends on many factors such as leadership, management, functioning under the conditions of the requirement of the law of social sufficiency, and correspondence between functional and organizational architecture, etc. In order to realize this, it is necessary to produce a quality product that satisfies the requirements of the shareholders, to be profitable in the market and competitive with its qualities. For these reasons, the security of the quality management system in the organization is topical. The security of this system ensures the achievement of organizational goals, which is why it is also of vital importance for the stable functioning of the organization.

Considering the highly competitive and dynamic domestic and international environment, in order to achieve the mentioned goals, it is necessary to ensure an

adequate level of security both internally and externally. In this context, a study of the relationship between the security of the quality management system (QMS) and the security of the state is of scientific interest.

It is in this direction that the author develops his idea of researching this relationship, which is where the goal of analyzing and presenting opportunities for improving the security management model in organizations with functioning quality management systems comes from.

To achieve the stated dissertation goal, the following main research tasks have been solved:

1. The essence of the "security" category and its relationship with the quality system in the organization is analyzed.

2. Definition of main problems in quality management in organizations, threatening their security.

3. Models and guidelines for improving security in quality management systems are proposed.

The object of the study is the quality management systems in business and public organizations and their relationship with security.

The subject of the study is security management methods and approaches and their impact on quality management systems.

The defined working hypotheses allow the study to get focused on achieving the research goals, namely, the improvement of security management approaches and strategies for quality management systems in organizations and the implementation of appropriate policy in this regard, will reduce risk and harmful influence of the accompanying factors. The author correctly decomposes the main

hypothesis into three sub-hypotheses.

Due to the wide scope of the topic, limitations were appropriately introduced in the study, which allowed the author to focus on the role of strategic security management in quality management systems, considering only the main issues affecting the security of the organization. The focus is on finding a solution to improve the approaches and methods of security management in quality management systems.

The theoretical methods and methodology of the research were well chosen by the author and contribute to the achievement of the set scientific goal and to the fulfillment of the research tasks.

2. Degree of knowledge of the state of the problem and creative interpretation of the literature used.

The doctoral student entered the scientific problem in the necessary depth, which allowed him to conduct the necessary theoretical and empirical research and, on this basis, obtained useful scientific and practical results. The content of the dissertation gives reason to conclude that the doctoral student is able to use known scientific theories, interpret them and generate new useful theoretical and practical-applied knowledge.

3. Compatibility of the chosen research methodology with the set objectives and research tasks in the dissertation.

The adopted structural plan, methodology and methods for conducting the scientific research are relevant, appropriately and expediently selected, correspond to the thematically derived problem and have ensured the achievement of the set

research goals by successfully solving the defined research tasks. The used literary sources and many well-known globally accepted standards have allowed the author to acquire the necessary specific knowledge to carry out the research on the topic, which fulfills the educational requirement of the individual work plan of the doctoral student.

The acquired knowledge allowed the author to carry out the necessary analytical studies of the object and the subject on the subject and to prove the main and the two hypotheses derived from it, which fulfilled the requirements for the implementation of the scientific and research part of the individual work plan of the doctoral student. With this, the goals set in the dissertation have been achieved.

4. A brief analytical description of the nature and credibility assessment on which the contributions of the dissertation are built.

The presented dissertation work, on which the scientific and applied contributions of the doctoral student are based, is in the form of a complete, complete, independent scientific study on the topic. The author has chosen well-known scientific methods and tools, interpreted them appropriately for the purposes of research on the subject of the dissertation, and conducted the necessary and appropriate analyzes and conclusions.

The purpose of the research, the tasks, the object and the subject of the research, the main and derivative working hypotheses, the methods and methodologies used are well defined. The results are approved in publications that give the scientific community the opportunity to learn about the author's achievements.

In the introduction of the dissertation, the topicality of the topic, its practical

nature and the significance of the solution to the problem are substantiated. The necessary attributes for dissertation research are presented.

In the *first chapter*, the theoretical foundations of the study are laid out. It is logically correct to begin with a theoretical analysis of the essence and content of the concept of "security". Main features of globalization and some important security issues arising from it are outlined. Relevant, important elements of contemporary geopolitical theories relevant to security on a global scale are selected. Expedient approaches and methods for implementing a security policy have been analyzed. It is focused on the economic aspect of security, and from there to security problems in economic organizations, which has allowed the author to select relevant theories for internal organizational control.

For the purposes of the dissertation, the structure and essence of the quality management systems were analyzed. Appropriate classical methods for assurance, refinement and statistical quality control are analyzed. The chapter ends with reasoned and relevant conclusions.

The *second chapter* is dedicated to the study of models for improving security in QMS. Known standards that are relevant to the researched dissertation problem, such as security management systems in the organization, quality management systems, information management systems in the organization, are selected and proposed for implementation in practice. Attention is paid to the security of risk management systems and process continuity management systems. Challenges and difficulties in this regard are outlined.

The chapter ends with reasoned and relevant conclusions.

In the *third chapter*, models for improving security in quality management

systems are studied, using the systematic approach with an emphasis on the economic aspect of the organization's security. The need to create a workplace culture and appropriate working conditions, in order to improve management in enterprises, is emphasized (p. 126). The principles of the ISO 9001:2015, ISO/IEC 27001:2022 system standards are reviewed, the advantages of their application in a quality management system and for increasing information security are indicated. The possibilities that the standards provide for an adequate response to the challenges in these areas are indicated. The advantages of implementing the PDCA/Plan-Do-Check-Act cycle in QMS are analyzed.

A vision for business improvement by applying the EFQM model/Excellence Model/ is proposed, its advantages, basic principles (Fig. 12, p. 129), such as leadership, training, partnership, innovation, development of new capacity of the organization are presented etc.

The possibilities for improving the business through the application of the ISO 9001:2015 standard have been analyzed to the necessary extent, namely: quality management system; management responsibility, resource management, product life cycle processes; measurement, analysis and improvements.

Basic principles and elements of the financial control system are analyzed. The importance of financial control for the stability of the organization is revealed.

-ISO 27001:2022 for information security management: ;

- for the management of non-In a logical sequence, the author reveals the main elements of the content and their essence of an Integrated Management System, from the point of view of improving security in the organization. The author proposes applying the requirements of ISO 9001:2015 standards for quality

management; ISO 14001:2015 for environmental management; ISO 45001:2018 for health and safety management; ISO 22000:2018 for IT service management; ISO 31000:2018 for risk management; ISO 27001:2022 for information security management; ISO 22301:2019 for business continuity management.

The author's proposed views on the complex implementation of the considered standards in a conceptual model for increasing the security of the QMS and ultimately of the organization lead to a synergistic effect for achieving the set research goals.

The chapter ends with reasoned conclusions. The dissertation ends with a conclusion summarizing the results.

The three publications presented are related to the topic of the dissertation research and give a clearer picture of the achievements of the doctoral student.

5. Scientific and applied contributions in the dissertation (nature and character)

Dissertation contributions reflected in the abstract demonstrate the doctoral student's achievements and are evidence of his scientific interests. They can be summarized as follows:

Scientific contributions

1. Knowledge about the possibilities of increasing the security of the QMS in the organization has been synthesized.
2. The possibility of applying known, globally accepted standards for their implementation in the QMS in order to increase its security has been proven.
3. The relationship between the security of the SMC, the economic security of the organization and the national security is revealed.

Applied Contributions

1. A set of practical-applied tools from internationally recognized standards has been synthesized, their applicability for increasing the security of SMC has been proven.
2. A conceptual vision for the application of known standards in the security management system of the QMS is presented.

6. Evaluation of the degree of personal involvement of the doctoral student in obtaining the contributions

The authorship claimed by the doctoral student for the research carried out in the dissertation, the specific author's style and the results obtained are grounds for concluding that they are her personal work. At the moment, within the scope of my competences, I do not find grounds and data for plagiarism.

7. Assessment of the publications on the dissertation

The presented three publications on the subject allow to obtain public information about the dissertation work among specialists in this field.

8. Using the results of the dissertation in scientific and social practice

The results obtained in the dissertation work are useful and may be of interest to managers, students, graduates, doctoral students, researchers, managers, politicians and others interested in the topic.

9. On the abstract to the dissertation

The abstract of the dissertation work has been developed in accordance with the requirements of ZRASRB and PPZRASRB. It presents the main ideas and synthesized conclusions of the dissertation. It faithfully reflects the results achieved by the doctoral student.. It faithfully reflects the results achieved by the

doctoral candidate.

10. Opinions and recommendations

Some recommendations and critical comments can be made to the candidate's dissertation work, abstract and publications, such as the formulation of some problems, the completeness of some of the analyses, the precision in the vocabulary when formulating individual results. In his future scientific work, the doctoral student should pay attention to some of the following recommendations:

1. To increase his knowledge about the essence, content, role and functions of basic phenomena (phenomena) and their definition. To pay particular attention to the definition of the concept of "security", "risk", "threat". Quoting a definition from an explanatory dictionary is not sufficient for the purposes of scientific research, e.g. page 107 the concept of risk. It is necessary to reveal its essence, content, its place in security as a phenomenon, and from this position to define the goals of the research.

2. The presented schemes (schedules) should have titles. In some places, these are missing in the dissertation, e.g. pp. 13, 15, 16, etc.

3. To avoid the admission of technical improprieties, such as (quoted): "Cyber security is still one of the ten biggest risks and threats", page 28.

4. To apply the scientific approach and criteria when selecting and citing authors. There are quotes that have characteristics of "lay" theories, e.g. On pp. 39, 40-41, 48, 124.

5. To clarify, according to the scientific approach, the essence, content and definitions of the concepts used. There is a confusion of concepts, for example: "The systems approach, which is an international research method, is based on the

assumption of" page 125.

6. In the specified literature used by sites, the date of visit should be indicated as accepted. For example, the specified source under No. 135 in the bibliographic reference, on the date 23.09.2024, cannot be found as of the date 29.09.2024.

Question for the doctoral student: What is the similarity and what is the difference in the essence of manifestation and the content of the concepts "risk" and "threat"?

These recommendations and notes do not significantly affect the essence, significance, relevance and importance of the contributions received by the doctoral student and do not prevent their applicability in practice.

11. Conclusion

I give an overall positive assessment of the thesis proposals for review, I vote positively and I propose to the respected members of the Scientific Jury to vote positively for the award of the educational and scientific degree "Doctor" in the professional field "9.1 National Security", field of higher education "9. Security and Defense" to Ivanka Nenova Nikolova.

REVIEWER:

Prof., Eng. Evgeni Manev, PhD

30 September 2024