

NEW BULGARIAN UNIVERSITY

REVIEWS

By Professor, Doctor of Military Sciences, Georgi Vassilev Bahchevanov, Professor at New Bulgarian University, Higher Education Area 9. "Security and Defense", professional field 9.1. "National Security"

To obtain a PhD in a professional field 9.1. "National Security" with candidate professor Dr. Nikolay Stefanov Radulov

Thesis topic: "Technological and digital transformations in security. Security 4.0".

The dissertation is in volume of 379 pages. Structurally, the work consists of nine parts, including an introduction, a conclusion, a bibliography and a list of keywords. 213 footnotes have been made. The list of used literature includes 107 sources, 2 of which are in Bulgarian, 1 in Russian, and 104 in English.

Sofia, 2020.

I. Main features of the dissertation.

1. Significance of the investigated problem in scientific and applied science.

The fourth industrial revolution poses new challenges for security professionals. Investigation of the current state and prospects of implementation in the security of a qualitatively new toolkit to put it at the level of the requirements of the world, considered from the standpoint of Industry 4.0. is a challenge both scientifically and scientifically - applied.

The relevance of the topic is directly related to the need to investigate the impact of new, modern technologies used or potential to be used in the security system, and the changes they cause, both within the system itself and in its individual elements (sub-elements), and also in the overall ecosystem of Security 4.0.

The significance of the study is determined by the usefulness of the author's completed theoretical concept for modeling existing and future opportunities to build an ecosystem of security that meets today's challenges.

The topic of the dissertation is fully consistent with the main content of the paper.

2. Accurately formulated goals and objectives of the thesis.

The author's thesis that "only the vigorous introduction of high-tech and digital tools and the subsequent restructuring of special services can ensure the security of people in the high-tech environment of Industry 4.0." Is clear and specific.

The purpose of the study is formulated precisely and in accordance with the topic. Four (4) research tasks have been formulated. The tasks are specific, show logical consistency, and address the research problem.

3. Evidence that the dissertation has been developed independently and does not literally repeat the subject matter and a substantial part of the content of the work submitted for the doctorate degree.

The structure, content and volume of the dissertation work meet the requirements. The results obtained are thoroughly and accurately described and, in my opinion, are sufficient to achieve the stated purpose and fulfill the set scientific tasks. The dissertation is an independent work of the author. The dissertation does not repeat either the subject matter or the content of the work for the doctorate degree.

4. Degree of knowledge of the status of the problem and correspondence of the literature used.

The author knows in detail the status of the problem. The proven research flair, extensive practical and teaching experience and appropriate education allow him to take the necessary seriousness to the topic. It is creative, I would say too critical of existing literary material. His assessment of the status of the problem at the time of the dissertation was published is correct.

The sources used are 176 pieces. An analysis of the list of titles used indicates that the author is very knowledgeable.

5. Correctness in quoting a representative number of authors.

Sources from Bulgarian, Russian, English, German, French, and other foreign authors on security theory, geopolitics, history, economics, military science, sociology, anthropology have been used in the research work. The sources are quoted very correctly. 213 footnotes have been made.

6. Availability of a grounded and developed theoretical model of the study.

The author has developed and used a scientifically sound and applicable research model. This allowed him to successfully deal with both the interdisciplinary nature of the topic and its extreme complexity.

7. Compliance with the chosen methodology and methodology of research with the stated purpose and tasks of the dissertation.

The methodology of the dissertation research is selected correctly and correctly. It is aimed both at achieving the goals and objectives of the research demand, as well as proving the basic research thesis. The main method used by the author is the systematic approach.

The collection of research information was accomplished through a successful combination of research methods. The inductive and deductive method, the analysis, the comparative analysis, the analysis of the analysis and the synthesis are used in all parts of the study. They help to individualize the problems and at the same time to draw up summaries and conclusions.

8. Making own contributions to the collection and analysis of empirical data.

A theoretical-empirical study has been implemented with applied character on a relatively poorly studied issue, both in the world and in Bulgaria, which successfully synthesizes

theoretical analysis, empirical research, conceptual and applied model for a modern functioning of security structures.

II. Contribution Description:

1. Brief description of the nature and assessment of the reliability of the material on which the contributions of the dissertation are built.

The dissertation has made scientific and applied scientific contributions. They can be related to the accumulation of new knowledge related to the current state and prospects of implementation in the security of a qualitatively new toolkit, which will put it at the level of the requirements of the world, considered from the position of Industry 4.0.

The contributions enrich the existing knowledge, prove and develop significant countries in the existing scientific problems revealed by the author.

2. Description of the applicant's contributions and their classification.

The dissertation contains theoretical summaries and solutions to scientific or applied scientific problems that make an original contribution to science.

These contributions are:

The problem related to the incorporation of modern technologies and digitalization of security is analyzed.

An in-depth assessment has been made, characterized by the complexity and synergies regarding the capabilities of new technologies to generate new types of crime.

The field of digital crime has been analyzed and presented not only in cybercrime, which greatly narrows the possibility of thinking and discussing the problem, but also from the point of view of an infinitely digital world - a world of big data, the internet of everything and virtual reality.

A creative, scientifically sound and previously unused approach has been applied to analyze the topic of security through the prism of the high-tech world and the digital being, but in a complex aspect also with regard to the theory of intelligence, counterintelligence and security.

Definition of concepts such as Security 4.0, Security ecosystem, ecosystems of individual crime prevention applications, as well as their structural and semantic analysis.

Models for the use of modern technologies in the theory and practice of security have been created and described by the author. Ideal models of new security products have been proposed.

The research presents scientific research that proposes concrete, useful and practicable solutions based on clearly articulated approaches for the effective implementation of new, up-to-date intelligence tools for the prevention, prevention and detection of national security crimes.

3. Assessment of the degree of personal participation of the dissertation in the contributions.

The dissertation and the abstract are an independent work of the author and successfully defend the claims made by him in the reference for scientific and scientifically applied contributions.

4. Assessment of the correspondence of the abstract with the basic principles and contributions of the dissertation.

The abstract is developed according to the requirements and reflects the nature, methodology and results of the research.

III. Impacts of dissertation work on the external environment.

1. Assessment of dissertation publications: number, nature of publications in which they are published.

The publications related to the dissertation are 10 (ten). The style of the author is deep, accessible, academic. In my opinion, these publications are an essential part of the study and reflect the results obtained in it.

2. Use and quotation from other authors, scientific press reviews, etc.

The practical utility of the dissertation is indisputable. The ideas and approaches described therein can be used to implement in the security of a qualitatively new toolkit that puts it at the level of the requirements of the world, considered from the position of Industry 4.0.

IV. Personal qualities of the author (if the reviewer knows it).

I know Professor Nikolay Radulov as one of the leading experts in the field of national security. Proven researcher and respected by fellow and student lecturer. Possesses exceptional creative ability.

V. Opinions, recommendations and comments.

The conclusions to the individual chapters are in the text. It could have been separated from the content.

VI. Conclusion

The dissertation developed by Professor Nikolay Stefanov Radulov on the topic "Technological and digital transformations in security. Security 4.0 "in content, volume and structure meets the requirements for obtaining the degree of Doctor of Science, regulated by the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for its implementation.

My rating is POSITIVE.

I propose to Nikolay Stefanov Radulov, author of the dissertation "Technological and digital transformations in security. Security 4.0 "to be awarded the degree of Doctor of Science in Higher Education: 9. Security and Defense, professional field: 9.1. "National Security".

Date
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Signature: