



**HIGHER SCHOOL OF SECURITY AND ECONOMY  
PLOVDIV**

**To the Chairman of the Scientific Jury  
With order number: № 3-PK-165/20.03.2020 .  
To the rector of NBU  
Sofia**

**Statement**

**from** Prof. Tomo Tsvetanov Borisov PhD,

Deputy Rector of the Higher School of Security and Economics – Plovdiv,  
Higher Education Area: 9. "Security and Defense", Professional area: 9.1. "National Security", on dissertation submitted for the degree of Doctor of Science, Higher Education Area 9. Security and Defense, professional field 9.1. "National Security", Doctoral Program "Security Strategies and Policies", developed by Prof. Dr. Nikolay Stefanov Radulov, dissertation topic: "Technological and digital transformations in security. Security 4.0 "

**Sofia**

**2020**

## **1. SIGNIFICANCE OF THE RESEARCH PROBLEM IN SCIENTIFIC AND SCIENTIFIC APPLICATION.**

I have no conflicts of interest caused by my participation in this jury, nor do I have any joint publications with the PhD student. In preparing the opinion, I had a dissertation, an abstract, and a CV. The information provided shows that Prof. Dr. Nikolai S. Radulov meets the requirements of Art. 12 (1) and Art. 12 (5) since he holds a Doctor of Philosophy diploma from 1992, and from the list of doctoral dissertation publications (2017-2019) it can be clearly concluded that the dissertation does not "literally repeat the topic and a significant part of the content "of the" doctorate "submitted for the degree

The thesis underlying the dissertation submitted for review is 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.

One of the poorly researched aspects in security science is to identify those aspects of high technology and digitalization that would contribute to achieving sufficient security for people in the rapidly evolving technological world. In this regard, the significance of the problems examined in the thesis is indisputable and well systematized. It is safe to say that the choice of a dissertation topic to analyze and evaluate in detail the relationship between the technological revolution and the definition of Security 4.0 is successful, and the results have both theoretical and scientific implications. applied meaning.

## **2. DEFINITY OF THE OBJECTIVES AND TASKS IN THE DISSERTATION WORK.**

The dissertation submitted for defense is a scientific and applied research with theoretical and empirical elements. It is 379 pages long and consists of nine sections, including an introduction, a conclusion, a bibliography and a list of keywords.

The author defines his research goal as follows: to identify those aspects of high technology and digitalization that would contribute to achieving sufficient security for people in the rapidly evolving technological world - to create a vision for high-tech security. There are four main tasks to accomplish this goal. From the overall analysis of the dissertation, it is clear that the author has coped well with the formulated research tasks. I draw this conclusion on the basis of an assessment of the structure adopted, which is logical and substantiated and is a good basis for research with such heterogeneous and interdisciplinary nature of the subject under consideration. In the preface, the doctoral student clearly defined the relevance of the research problem, the purpose, tasks, subject and object of the research, the methodology used, as well as the thesis on which the research is based.

The research is placed within a number of limitations, with the author's ambition to cover the processes in depth and in principle. The contents of each section are divided into separate paragraphs, with specific and appropriate conclusions drawn at the end of each section. The contributions of the author are given in the conclusion of the dissertation.

The abstract is written in accordance with the requirements, corresponds to the dissertation and fully reflects its content. It is worth noting that the dissertation is well

edited and distinguished by its analytical and logical nature. It shows the applicant's high scientific and expert training.

### **3. CONFORMITY BETWEEN THE METHODOLOGY AND RESEARCH METHODS SELECTED AND THE OBJECTIVE AND OBJECTIVES OF THE DISSERTATION WORK.**

In order to achieve this goal and to accomplish the tasks of the dissertation, Prof. Radulov used a set of theoretical and empirical methods. In an effort to fully clarify the state of the problem, Prof. Dr. Radulov expediently used the historical method of inquiry.

The tasks of the dissertation, Prof. Dr. Radulov solved, creatively applied the classical approach to the topic of security and included the use of logical methods, especially analysis, synthesis and deduction. The inductive method is also widely used in the study. By analyzing and using the method of comparison and adaptation, the existing and ready-to-introduce technological tools allowing optimization of the activity and high efficiency are derived. With the help of the successfully combined methods, Prof. Dr. Radulov was able to categorically solve the main tasks and achieve the main goal set in the research.

### **4. THE SCIENTIFIC AND SCIENTIFIC CONTRIBUTIONS OF THE DISSERTATION WORK (DESCRIPTION AND EVALUATION), INCLUDING THE ORIGINAL CONTRIBUTION TO THE SCIENCE.**

The stated formulations of subject, object, purpose and research thesis give me reason to conclude that Prof. Dr. Radulov has approached the research problem on a large scale. The scientific courage to systematize and analyze such a major research problem must be highly appreciated. I accept that the contributions to the dissertation submitted for review are not only scientific in nature, because they can be applied successfully in research and education.

#### **Contributions to the dissertation can be accepted:**

1. the concepts of Security 4.0, the Security Ecosystem, as well as their structural and semantic analysis are defined;
2. models for the use of modern technologies in the theory and practice of security have been created and described, as well as the creation of conceptual models for new application possibilities and new security products;
3. it has been proven that the optimal and up-to-date development of special services and the achievement of quality civil and national security is only possible through the vigorous introduction of high-tech and digital tools;
4. possible high-tech constructions are indicated, existing developments, applications and conceptual designs are integrated into a single system;
5. for the first time analytical and complex in the dissertation developed by Prof. Dr. Radulov the following are analyzed and analyzed: security 4.0,



ecosystem of security, ecosystems of the individual applications for combating crime

#### **5. ASSESSMENT OF DISSERTATION PUBLICATIONS.**

I am familiar with a great deal of scholarly publications, I have also observed public appearances and analyzes, and I believe that Prof. Radulov is a s, respected and productive expert, teacher and researcher. From the reference I have identified eleven scientific publications on the topic of the dissertation submitted for review, four of which are in Cyrillic and seven in Latin. I believe that the publications cited are in the required volume. Their analysis shows that they adequately reflect the studies carried out and the results obtained.

This impressive scientific output of the author in this study alone, convincingly shows that the results of the dissertation have become available to the broad scientific community.

#### **6. COMMENTS, RECOMMENDATIONS AND NOTES**

The doctoral thesis presented has the character of a completed scientific research. With it, Prof. Radulov demonstrated his qualities as a researcher, having decided on a high scientific level a significant research task.

The dissertation work and the scientific contributions are the personal work of the doctoral student, who demonstrates the ability to study in depth and independently an important problem, to systematize experience and to synthesize knowledge, and reasoned conclusions. The dissertation is a current and unexplored topic, with original scientific and applied results that contribute to the science.

#### **7. CONCLUSION WITH CLEARLY FORMULATED POSITIVE AND NEGATIVE ASSESMENT OF THE DISSERTATION WORK.**

Presented by Prof. Nikolay Stefanov Radulov, dissertation on the topic: "Technological and digital transformations in security. Security 4.0 ". for the Doctorate of Science degree in higher education 9. Security and defense, professional field 9.1. meets the requirements of the ZRASRB, the Rules for the implementation of the ZRASRB and the Regulation for the development of the academic staff at New Bulgarian University, which gives me reason to declare my POSITIVE assessment and propose to the Scientific Jury to unanimously vote Prof. Dr. Nikolay Stefanov to be awarded the Doctor of Science degree.

Prepared the position:

  
/Prof. Tomo Borisov PhD/

03.04.2020 r.

Sofia